

NAME OF UNDERTAKING:

Environmental Assessment - Harbour Grace Ocean Enterprises Wharf, Dry Dock and Yard Extension

PROPONENT:

Harbour Grace Ocean Enterprises Ltd. (HGOE)

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Main

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NAME OF UNDERTAKING: Environmental Assessment - Harbour Grace Ocean Enterprises Wharf, Dry Dock and Yard Extension

PROPONENT: Harbour Grace Ocean Enterprises Ltd. (HGOE)

- (i) Name of Corporate Body: **Harbour Grace Ocean Enterprises Ltd**
- (ii) Address: **65-70 Water Street, Harbour Grace, NL, A0A2M0**
- (iii) Chief Executive Officer:
 - **Name: Paul Lannon**
 - **Official Title: Owner/Director**
 - **Address: 65-70 Water Street, Harbour Grace, NL, A0A2M0**
 - **Telephone No: 709 596 5186**
- (iv) Principal Contact Person for purposes of environmental assessment:
 - **Name: Paul Lannon**
 - **Contact Info as above**

THE UNDERTAKING:

(i) Name of the Undertaking:

- Wharf re-development, yard extension and Dry-dock construction. This will convert the old fish plant (formerly owned by Quality Baits) property into a modern wharf, laydown area and dry-dock facility. This project is undertaken as an extension of our shipyard operation and is located in a zoned industrial area.
- We should state here that that this project is a completely separate project from the Town of Harbour Grace's plan for a Marine Industrial Park (MIP).
 - *See Appendix A – Town of harbour Grace MIP concept map*

(ii) Purpose/Rationale/Need for the Undertaking:

- To meet the demands of the Canadian East Coast marine sector. This site will provide marine servicing, repair and construction requirements. This undertaking will enable HGOE to attract new business to the area, the region and the province while creating multiple job opportunities and new business for the supply and service sectors.

COMPATIBILITY WITH PROVINCE It is expected the facility will work well within the province. The expected growth of the offshore industry coupled with the growing fishing industry and expanding ship building market, could help grow this facility and thus provide provincial economic growth. Given the facility would be the only one of its kind in Conception Bay leads well to the viability of this marine base. Its closeness to the offshore production fields provides opportunity for offshore vessel and offshore servicing related work. The facility could also prove beneficial to the province for its vessel building capabilities when replacement of aging ferries needs to be addressed.

DESCRIPTION OF THE UNDERTAKING:

(i) Geographical Location:

- The site is located on Point of Beach at the end of Beach Hill in Harbour Grace, NL. The site is comprised of private held land and crown land under application. The site is a continuation of the present shipyard operation and is located in an industrial zone.

- Again we would like to reiterate that the Point of Beach site is in an industrial zone and is located off Water Street several hundred metres from the Heritage District of Harbour Grace. *(As per the Town of Harbour Grace Development Regulations 2010, any development adjacent or within 30 metres of historical sites or areas are reviewed to ensure that there are no negative effects on these properties.)*

- Harbour Grace offers a virtually ice-free harbour with navigation occasionally hampered by southerly flow of icebergs and pack ice off the entrance of the harbour in the spring of the year. It is possible for a thin layer of ice to form in the harbour during extreme temperatures in winter months. Thin land fast harbour ice of this type should not pose a risk to navigation for the size of vessels expected to use the facility. Normal precautions will have to be taken for vessels using the facility when icebergs and pack ice are present outside the entrance of the harbour.
 - *Appendix B – See two Topographic Maps of Town of Harbour Grace; three maps of Waters of Harbour Grace; Two Google Location Maps of Point of Beach*

(ii) Physical Features:

- Upgrade to land area for dry storage, upgrade to present wharf structure and construction of new floating dry dock. The required warehouse building is presently on-site, the land is developed and even grade.
 - *Appendix C for Site Plan*
 - No new roads are required and current access road will suffice
 - No pipelines are involved in the construction or operation of the facility
 - Sewer lines impacted
 - No transmission lines are to be impacted
 - Other marine facilities in the area will be enhanced by this project. They are:
 - The current HGOE operation
 - The Harbour Authority of Harbour Grace, adjacent to HGOE
- Area to be affected by the undertaking.
 - 4,035 square metres

- Drawings:
 - Phase 1 is the wharf redevelopment which is our first priority;
 - Phase 2 shows the two options for the placement of the dry dock. The wharf will be constructed to accommodate either option. The dry dock construction and placement will be determined once the wharf redevelopment is completed.
 - *Appendix C – Site Plan showing Phase 1 Wharf Redevelopment; Phase 2 – Options One and Two.*

- Physical and biological environments within the area potentially affected by the project.
 - Topography – Land is levelled industrial surrounded on the peninsula by the current operation of HGOE and also JAG Roof trusses
 - *Appendix B – See two Topographic Maps of Town of Harbour Grace; three maps of Waters of Harbour Grace; Two Google Location Maps of Point of Beach*
 - Waters of Harbour Grace – Adjacent to wharf redevelopment the water depths are between 8 and 10 metres.
 - *Appendix D - Crown Land*
 - No vegetation in area
 - Wildlife – mainly shoreline species – primarily gulls
 - Fish – common species found in embayments in NE NL.
 - Shoals, channels, buoys – This section outlines many natural and environmental features of Harbour Grace and marine activities in the area. This data that follows was provided through a study by SNC-Lavalin, December 2014.
 - *Appendix E - Maps for locations of Nav Aids and Buoys; SNC-Lavalin Study results; Letter from Hatch Mott MacDonald Engineering*
 - Noise – as currently experienced with HGOE shipyard operations; vessel movements, equipment activity and adheres to the Town of Harbour Grace’s bylaws.
 - Reference Environmental Permits/Assessments
 - *See Appendix F - environmental permit for HGOE; Reference Phase 1 EA for 24 Beach Hill; Phase 1 for HGOE shipyard; Ambient Air Sampling; Provincial Government Environmental Guidelines – Chapter 14*

(iii) Construction:

- Approximate total construction period.
 - Phase 1-A Wharf re-development - 6 months
 - Phase 1-B Laydown area - concurrent with Phase 1-A
 - Phase 2 Dry-dock - 6 months

- Proposed date of first physical construction related activity on site.
 - Wharf redevelopment immediately upon approval
 - Dry-dock to be determined

- Potential sources of pollutants during the construction period(s) including
 - Airborne emissions
 - List of equipment and environmental specs:
 - Excavator – Case CX210D – Tier 4 Final Emissions Certification
 - Dump Truck – 2012 International Diesel 7500SBA – Tier 4
 - Crane – Grove TMS475 Diesel/Hydraulics
 - Liquid effluents
 - Gas/oil refueling will occur offsite
 - Hydraulics fluids used - Petro-Canada ENVIRON AW – non-toxic, inherently biodegradable and recyclable
 - Spill containment – as per HGOE’s Emergency Preparedness Site Spill Response Plan (Appendix I)
 - Solid waste materials.
 - Wood/metal disposal – Newco Metals
Newco Metal & Auto Recycling Ltd. has been partnering with communities in Newfoundland and Labrador since 1985. Beginning with those early years, Newco has developed longstanding relationships with over 100 municipalities in the province, from New Harbour to Port Blandford to Labrador City, and everywhere in between. Some of the waste metals collected by Newco gets passed along to local companies, like Labco Foundry in Long Harbour. The rest gets exported to another fully certified and environmentally regulated recycler. (<http://www.newcometal.com/index.php>)
 - Potential causes of resource conflicts.
 - Water – siltation control during construction; minimum dredging may be required adjacent to dockside. The construction of the facility will use sheet piling and geotextile to help control siltation. The process would be to drive sheet piling in increments, drape geo textile to the bottom then back-fill with clean rock. This process will be repeated until the wharf reconstruction is complete.
 - Land – all infill material from local quarries; no erosion of shoreline
 - Heritage – not adjacent to Heritage District – site is industrial and is bordered by another business – JAG Roof Trusses – between the site and Water Street Heritage District.

Design Codes and References Where applicable, the design of the dock structures shall be in compliance with all Canadian Engineering & Construction standards, codes and design guides. Individual codes will be noted on the detailed specifications for systems and equipment. Equipment, where applicable, shall be Factory Mutual (FM) approved and/or Underwriters Laboratories (UL) listed.

(iv) Operation:

- How the undertaking will operate.
 - Run by private sector under current ownership of HGOE. Daily yard and dry dock activities include welding fabrication, vessel repairs (engines, hulls, vessel infrastructure, painting, fibre glassing) as permitted currently under our Environmental permit.
 - Clients include: OCI; Clearwater, Daley Brothers, Quinlan Brothers, Independent fishers, Canadian Coast Guard; NL Ferry Fleet; Offshore Oil and Gas (Hebron).
 - HGOE’s current HSE Plan will apply to this new facility
 - HGOE’s current Quality Plan (ISO 9001 2008 compliant) will apply.

- **Period of operation.**
 - It will be a permanent facility, operating year round.

- **Potential sources of pollutants during the operating period, including:**
 - Airborne emissions
 - List of equipment and environmental specs:
 - Crane – Grove TMS475 Diesel/Hydraulics
 - Forklift – Caterpillar GP15NM S4S Diesel – Tier 4 requirements
 - Liquid effluents
 - Gas/oil refuelling offsite
 - Waste management, liquid collection/disposal - Pardy's Waste Management and Industrial Services Ltd. (*Pardy's Waste Management and Industrial Services Ltd. was established in 1985 to meet the growing demand for responsible disposal of waste materials generated by industry in Newfoundland and Labrador. Pardy's Waste Management and Industrial Services Ltd. is ISO-9001:2000 registered - <http://www.pardyswaste.com/default.htm>*)
 - Spill containment/recovery practises in place (Appendix J)
 - Solid waste materials.
 - Wood/metal – Newco Metals for disposal/recycling – (<http://www.newcometal.com/index.php>)

- **Potential causes of resource conflicts.**
 - Water - Nil
 - Land - Nil
 - Heritage – Not adjacent to Heritage District
 - Ship emissions – similar to current HGOE operation;
 - Noise – similar to current HGOE operation

(v) Occupations:

- **Number of employees required for the construction and operation of the project as well as the expected duration of employment.**
 - 50 new long-term jobs
 - Transition team of 5 – 8 personnel from current employee group to guide the start up processes.

- **Enumeration and breakdown of occupations anticipated for this undertaking according to the National Occupational Classification 2006 (<http://www23.hrdc-drhc.gc.ca/2001/e/generic/welcome.shtml>).**
 - The following occupations and their NOC codes will be required for the operation of the facility:

	<u>NOC</u>
▪ Welders	7237
▪ Labourers	7612 (<i>other trades helpers & Labourers</i>)
▪ Pipefitters	7252
▪ Painters	7294
▪ Marine refitters	7316 (<i>Machine fitters</i>)
▪ Carpenters	7271
▪ Electricians	7241

- Direct hiring and/or contracting out will carry out work.
 - 60% direct; 40% sub during construction
 - 80% direct; 20% sub during operation
- Employment equity will be addressed relative to age and gender.
 - Hiring Policy - See Appendix H

(vi) Project Related Documents:

- Bibliography of all project-related documents already generated by or for the proponent.
 - *Fracflow Consultants*
 - *Land-Based Geotechnical Factual Report, April 21st, 2015*
 - *Hatch Mott MacDonald*
 - *HGOE – Sheet Pile Wall Preliminary Design Brief*
 - *Heger Dry Dock Preliminary Arrangement*
- provide one copy of any reports on environmental work already performed by or for the proponent.
 - *Appendix F includes;*
 - *Current environmental permit*
 - *Phase 1 EA – Dawes Welding/HGOE*
 - *Phase 1 EA – Quality Baits (24 Beach Hill)*
 - *Ambient Air Sampling Program*

APPROVAL OF THE UNDERTAKING:

Main permits, licences, approvals and other forms of authorization required for the undertaking.

- Transport Canada (Nav Aid) Letter (Appendix G)
- Bell Aliant (access) Letter (*Appendix G*)
- Department of Fisheries and Ocean, Canada
- Department of Environment and Conservation Government of NL
- Environment Canada

SCHEDULE:

The earliest and latest dates when project construction could commence (assuming all approvals are in place).

Earliest January 01st, 2016

Latest January 31st, 2016

The project is a number 1 priority for Harbour Grace Ocean Enterprises Ltd. We have a number of clients needing this infrastructure as support for their Newfoundland based operations. Currently these local companies are going to other regions and countries to get their vessel work completed.

FUNDING

This project does not depend upon a grant or loan of capital funds from a government agency (federal, provincial or otherwise). This project is dependent on private sector business and private sector funding.

22 OCT 2015  Date Signature of Chief Executive Officer

**APPENDIX A: Marine Industrial Park (MIP)
Town of Harbour Grace**

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON SITE BEFORE PROCEEDING. ANY AND ALL PARTS OF THIS PROJECT OR EXISTING UTILITIES TO BE REMOVED SHALL BE NOTED BY THE CONTRACTOR AND THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EXISTING UTILITIES.

**PRELIMINARY
NOT FOR CONSTRUCTION**

NO.	REVISIONS	DATE	BY	CHKD.

DATE	
SCALE	
PROJECT	
PROFESSIONAL SEAL	



**BAE · NEWPLAN
GROUP**

BAE · NEWPLAN GROUP LIMITED
1155 TORBARRIE RD. MOUNT PEARL, N.J. 07092
TEL: (201) 398-2111 FAX: (201) 398-2111

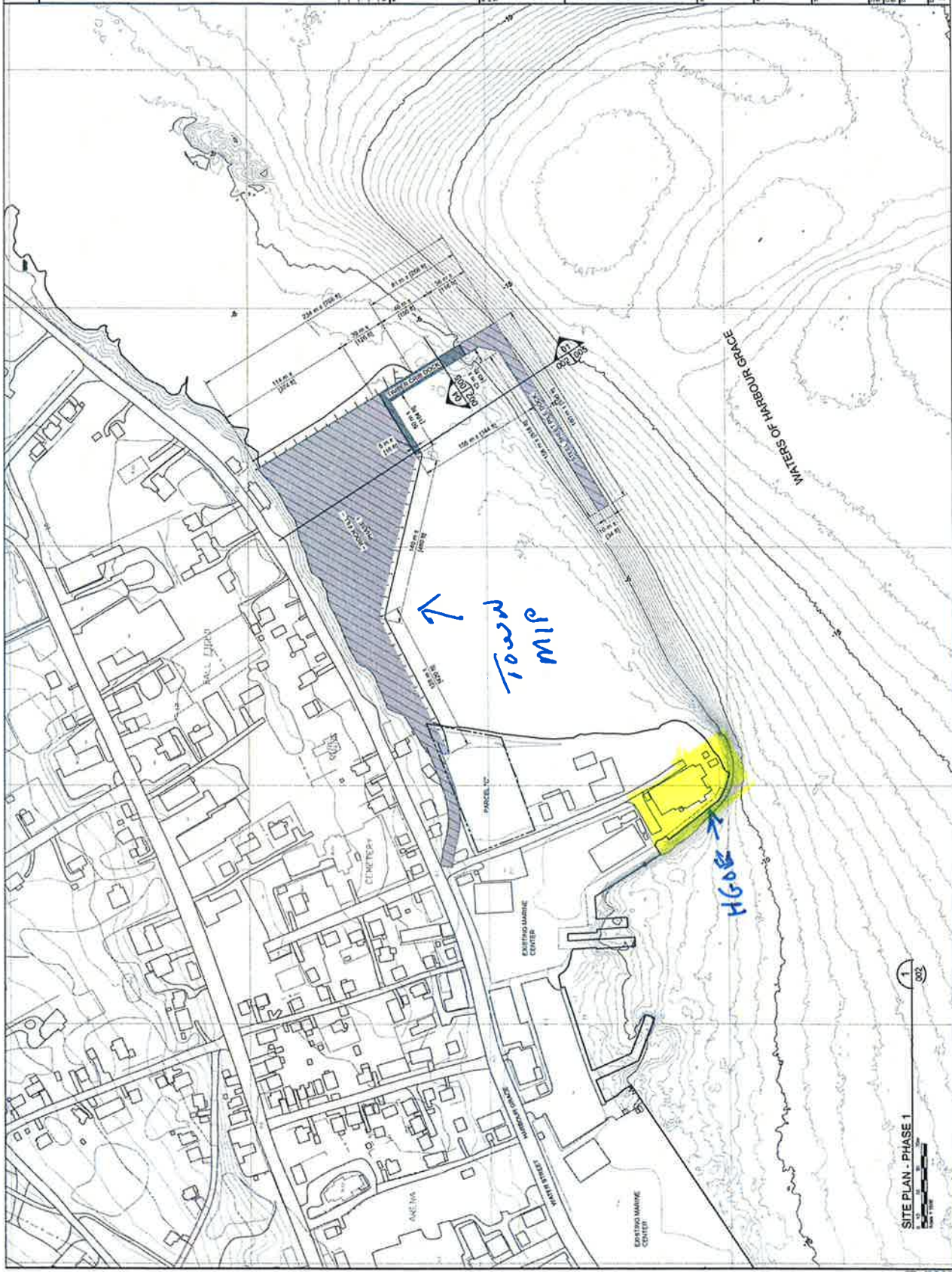
TOWN OF
HARBOUR GRACE

HARBOUR GRACE
OCEAN ENTERPRISES
PROPOSED EXPANSION

SITE PLAN
PHASE 1

DATE	
SCALE	
PROJECT	
PROFESSIONAL SEAL	
DATE	
SCALE	
PROJECT	
PROFESSIONAL SEAL	

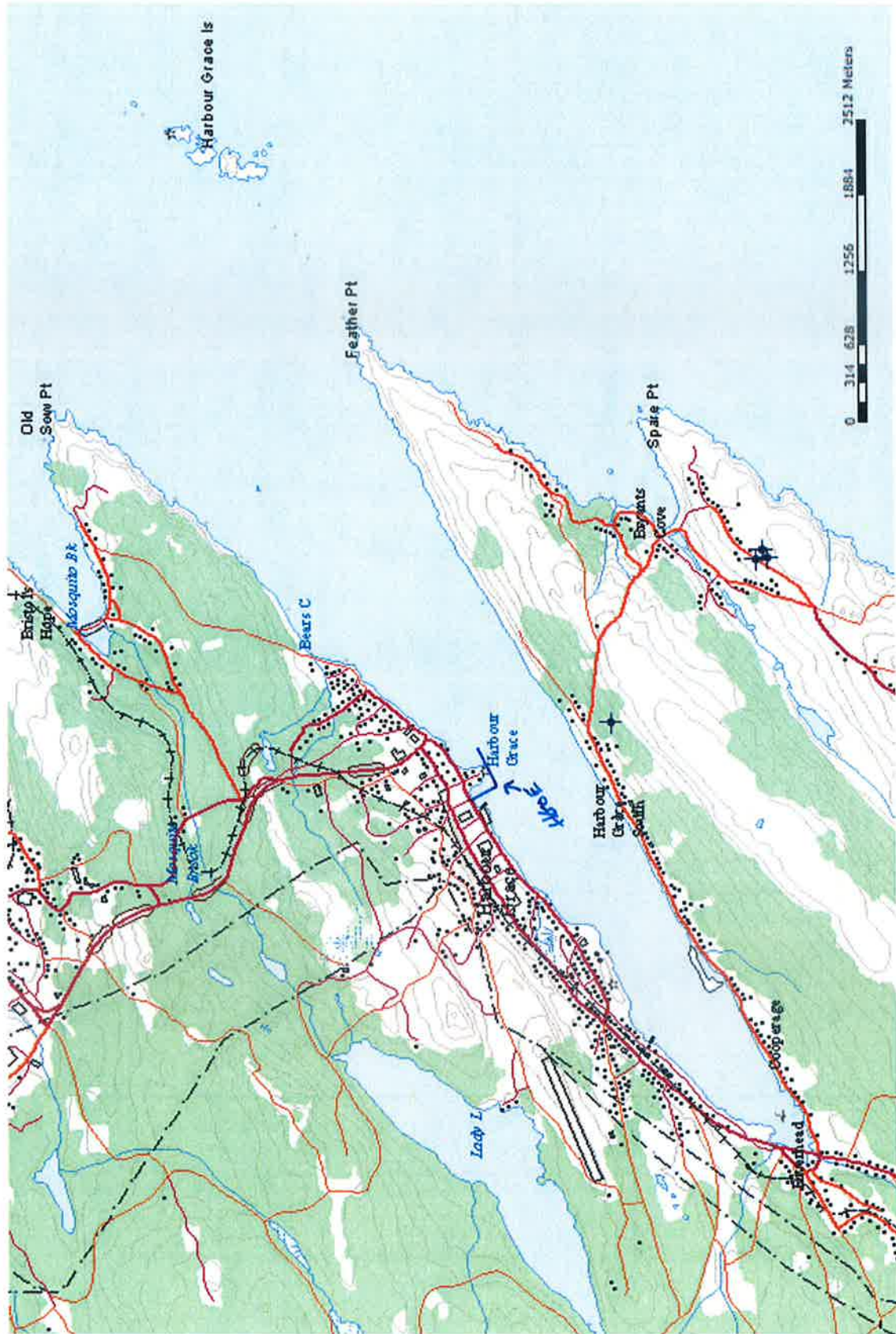
DW1 - XX - MA - XX - 002
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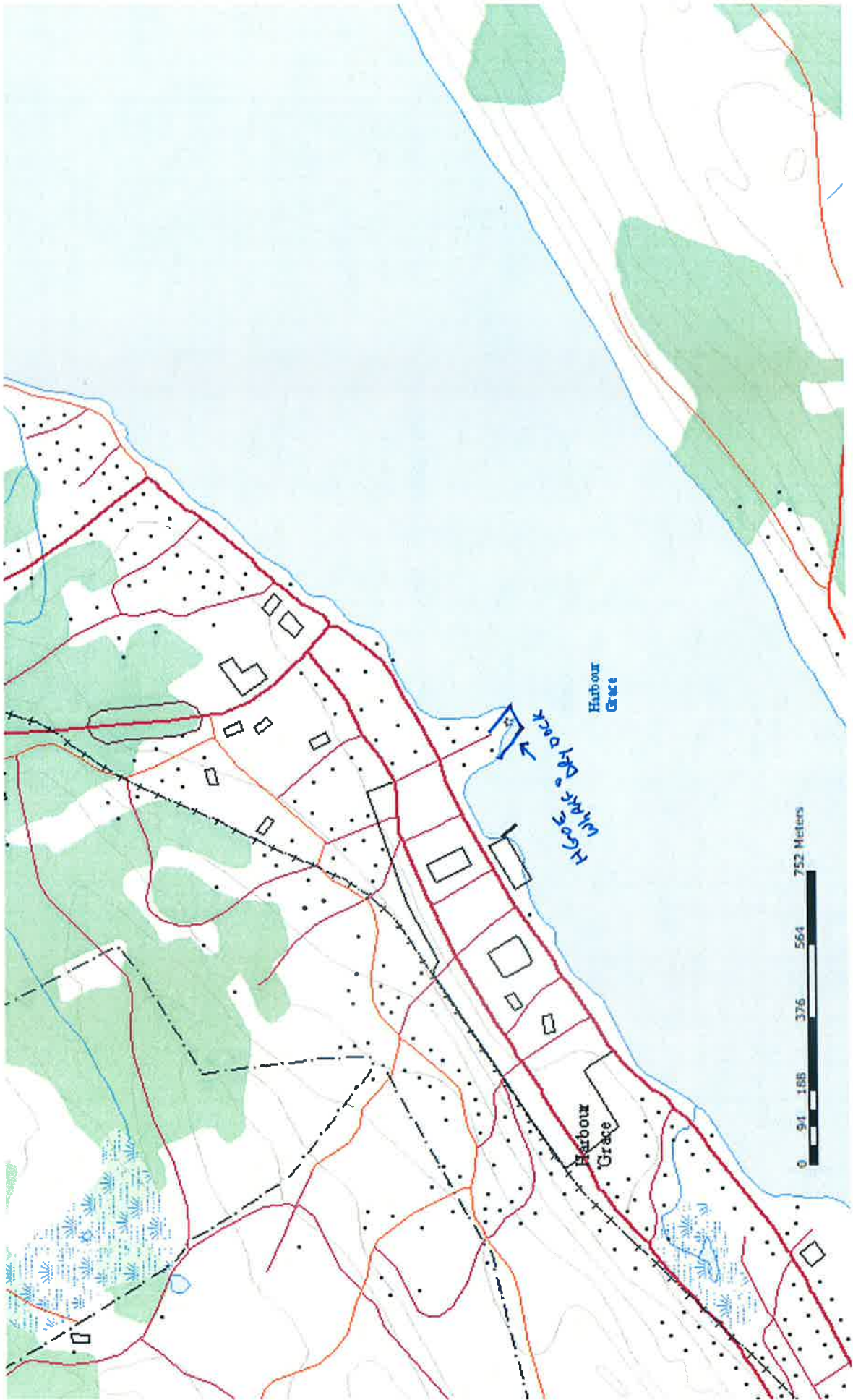


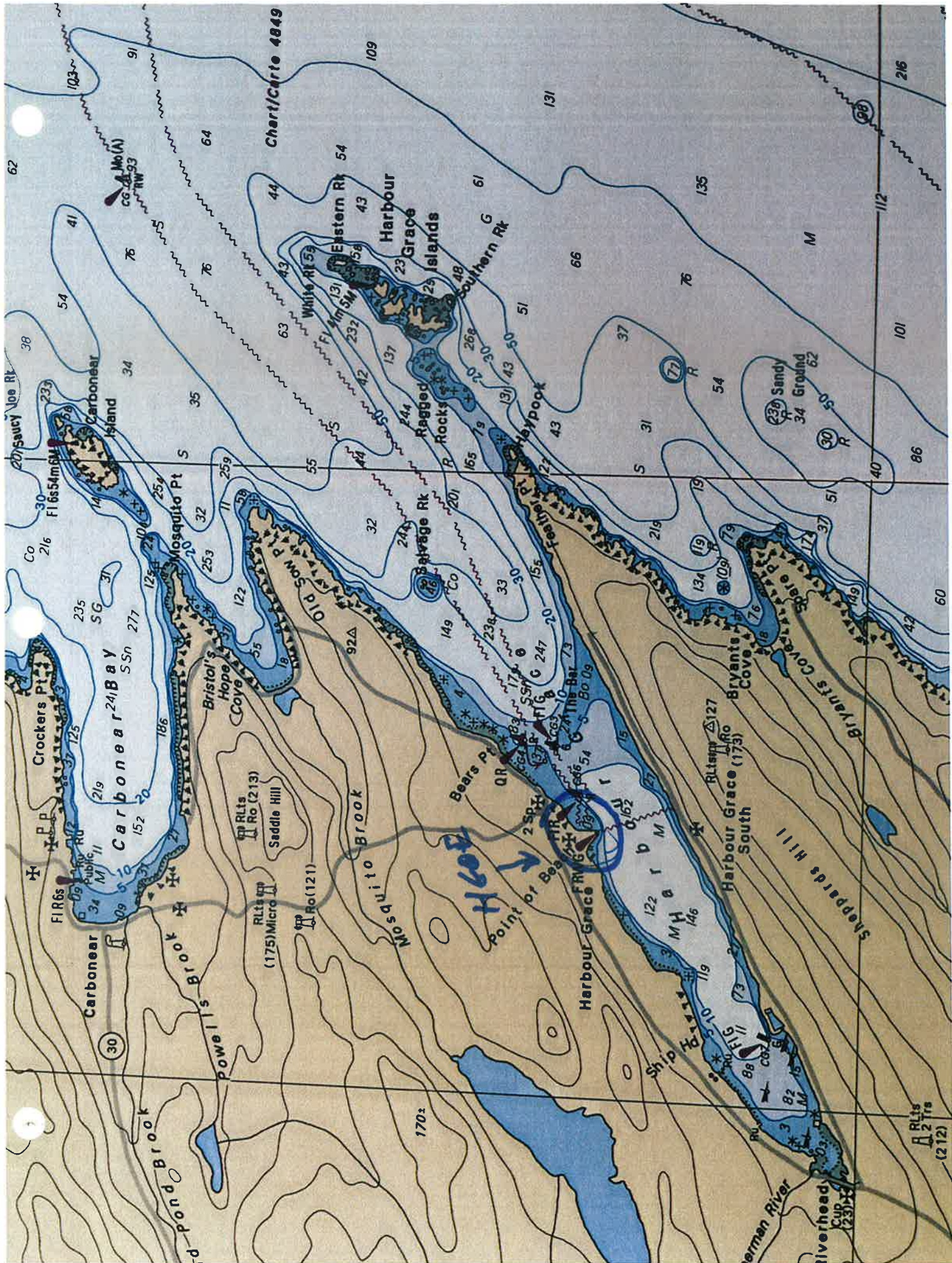
SITE PLAN - PHASE 1
1/8" = 1'-0"

APPENDIX B: Topography Maps

- 1. Two Topographic Maps of Town of Harbour Grace – Water Resource Portal**
- 2. Three topographic Maps of Waters of Harbour Grace – Canadian Hydrographic Services**
- 3. Two Google Location Maps of Point of Beach**





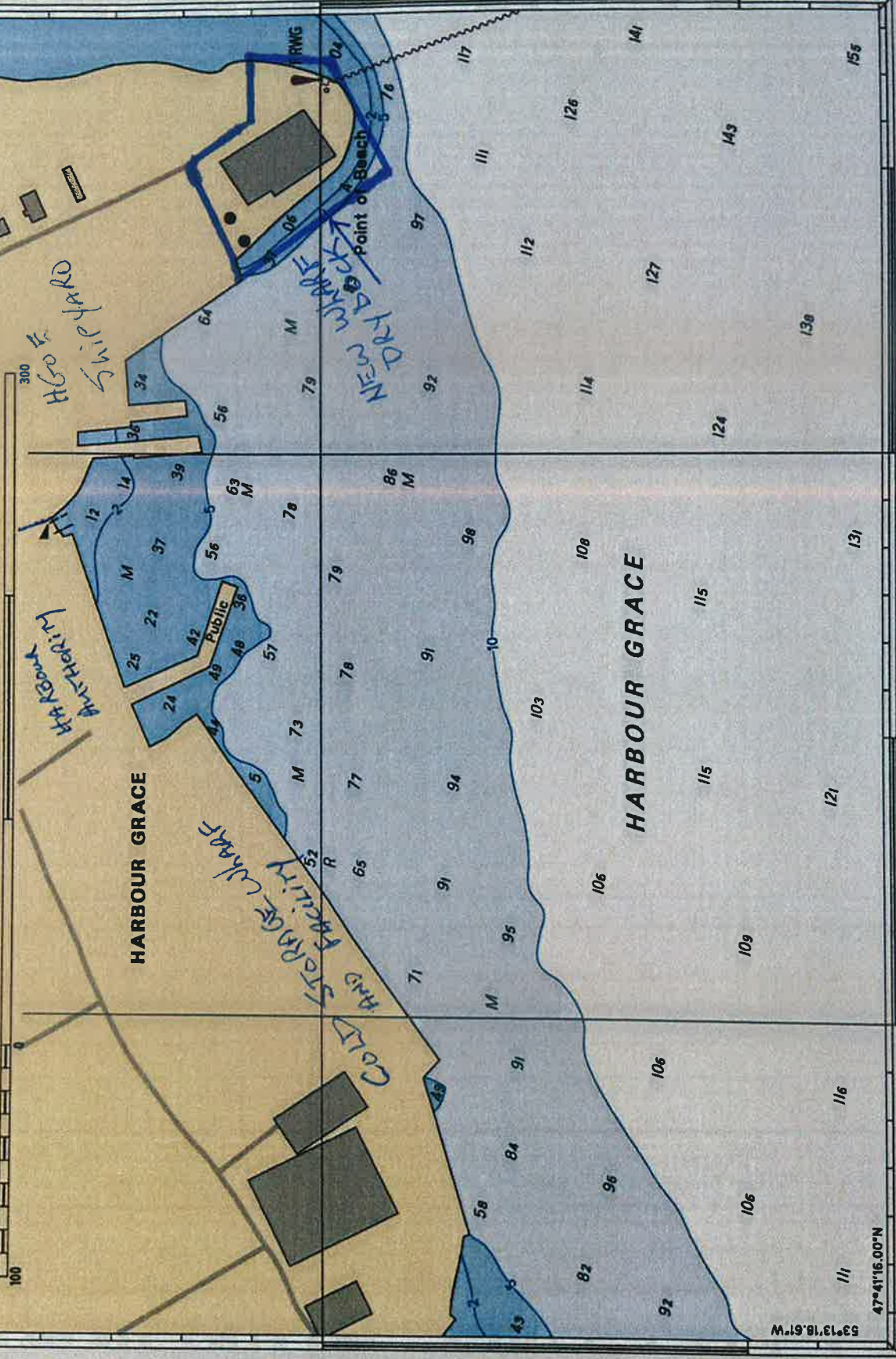


FISH PLANT/CONSERVERIE DE POISSON

Scale 1 : 3 000 Échelle

MAGNETIC VARIATION 024°W 1988 (8'E) DÉCLINAISON MAGNÉTIQUE

Mètres (47°41'N) Mètres



44'

43'



Imagery ©2015 DigitalGlobe, Map data ©2015 Google 100 ft



Map data ©2015 Google 500 ft

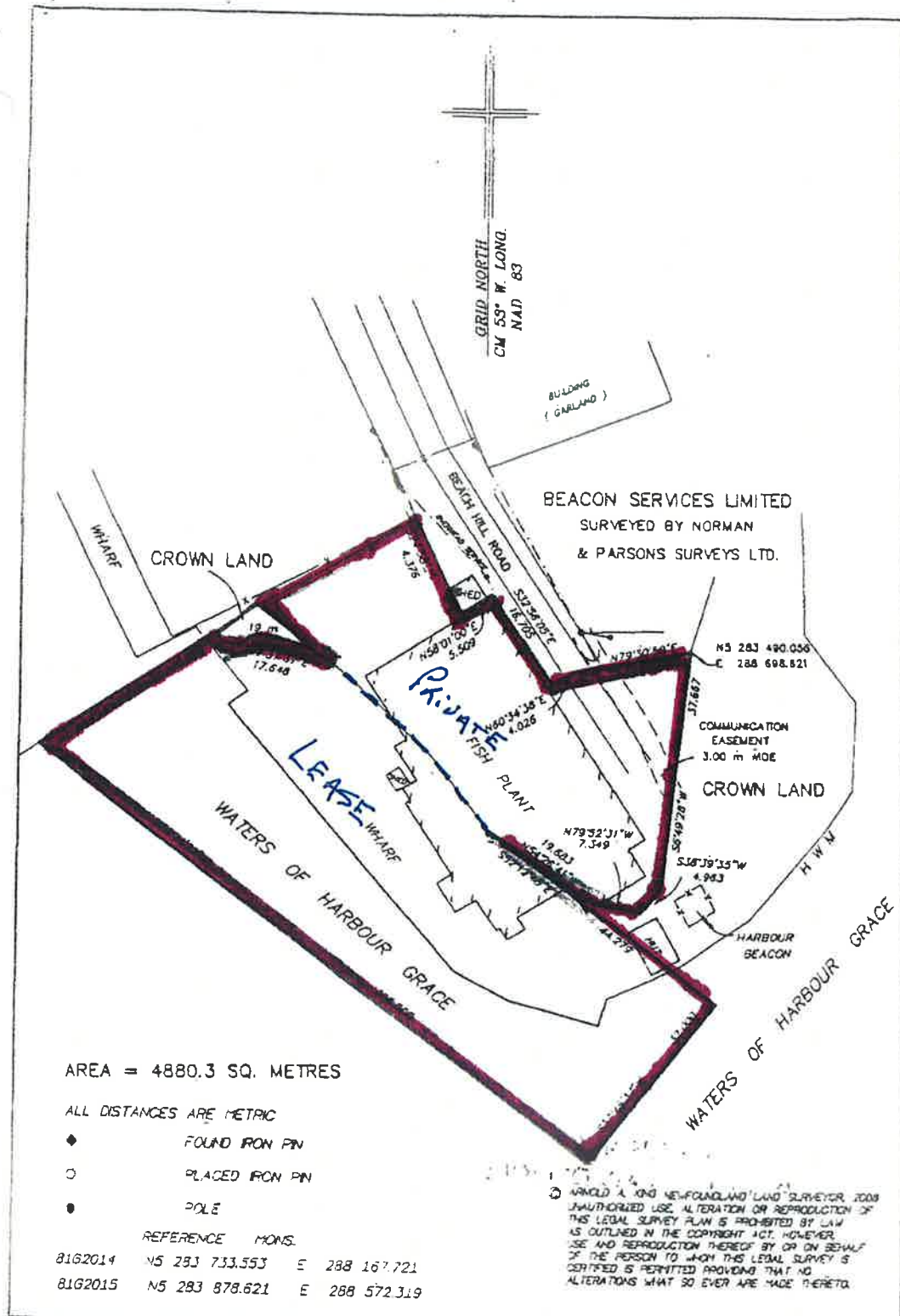
APPENDIX C: Site Concept

- 1. Current site showing old wharf**
- 2. Site/wharf re-development**
- 3. Dry dock placement – Option 1**
- 4. Dry dock placement – Option 2**

APPENDIX D: Crown land – Waters of Harbour Grace

- 1. Current Crown Land Lease and private held lands by HGOE. Includes waters of Harbour Grace adjacent to old wharf.**
- 2. Crown Lands Map issued denoting inclusion of additional crown land and waters of Harbour Grace as per current application # 148219.**
- 3. Engineering design/site map with outline of area including “new crown land assignments” if application # 148219 successful.**

— DENOTES
 LAND CURRENTLY
 HELD BY HGOE
 UNDER LEASE AND
 PRIVATE.



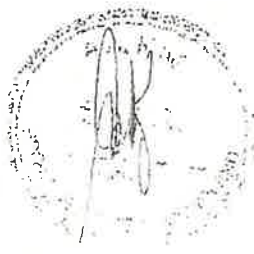
AREA = 4880.3 SQ. METRES

ALL DISTANCES ARE METRIC

- ◆ FOUND IRON PIN
- PLACED IRON PIN
- POLE

REFERENCE MONS.

81G2014	N5 283 733.553	E 288 167.721
81G2015	N5 283 878.621	E 288 572.319

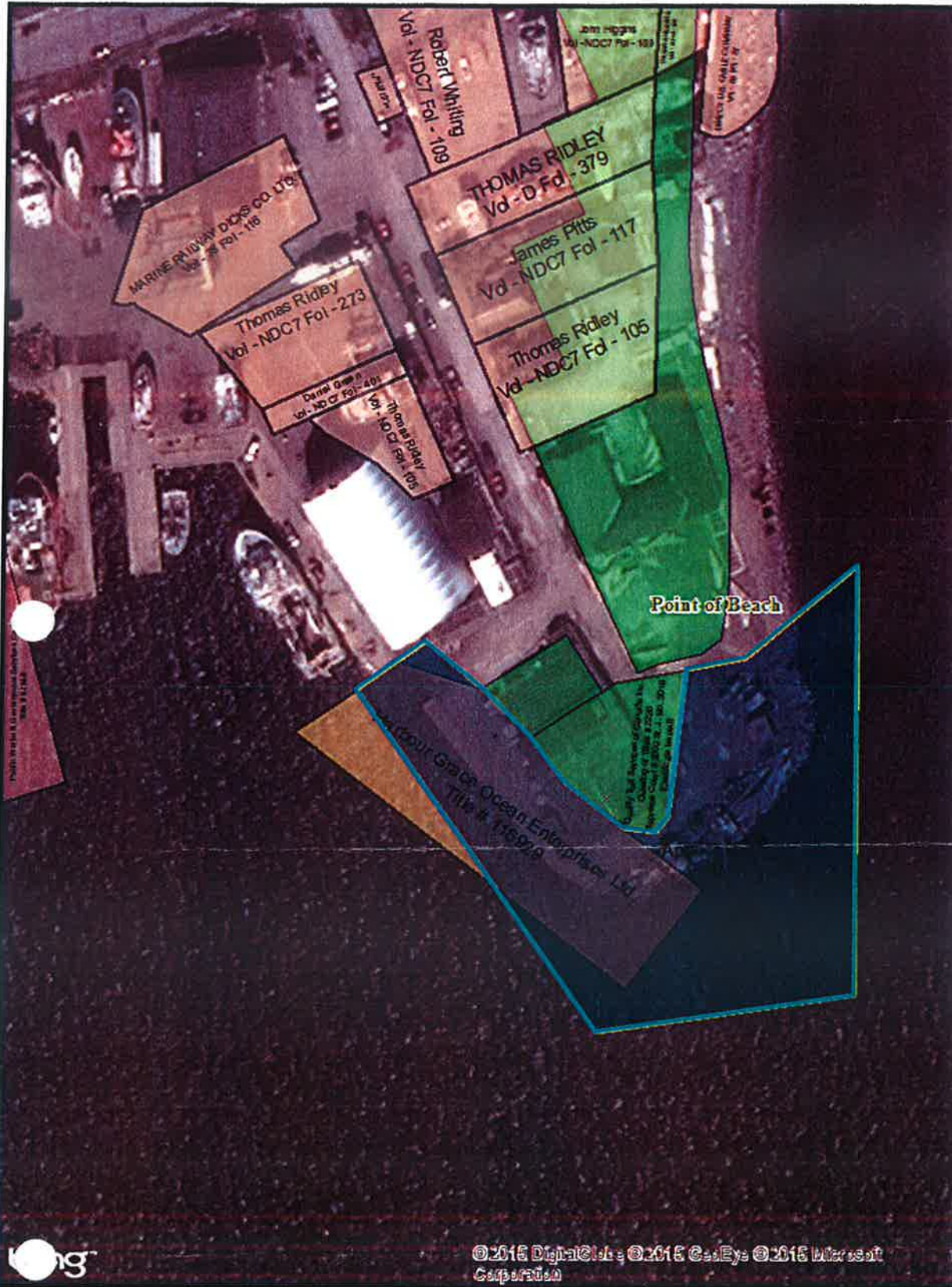


Hawco King Renouf Limited
 NEWFOUNDLAND LAND SURVEYORS CANADA LANDS SURVEYOR
 ST JOHN'S - NEWFOUNDLAND

QUALITY BAIT SERVICES CANADA INC.
 BEACH HILL ROAD HARBOUR GRACE

Scale	1	750	Date	MAY 2008
Surveyed By	N.S. & A.K.	Job No.	08248	

Government of Newfoundland & Labrador Dept. of Municipal & Intergovernmental Affairs



NOTE TO USERS

The information on this map was compiled from land surveys registered in the Crown Lands Registry.

Since the Registry does not contain information on all land ownership within the Province, the information depicted cannot be considered complete.

The boundary lines shown are intended to be used as an index to land titles issued by the Crown. The accuracy of the plot is not sufficient for measurement purposes and does not guarantee title.

Users finding any errors or omissions on this map sheet are asked to contact the Crown Titles Mapping Section, Howley Building Higgins Line, St. John's Newfoundland.

Users finding error or omissions can contact the Crown Titles Mapping Section by telephone at 729-0061. Some titles may not be plotted due to Crown Lands volumes missing from the Crown Lands registry or not plotted due to insufficient survey information.

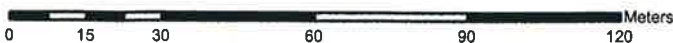
The User hereby indemnifies and saves harmless the Minister, his officers, employees and agents from and against all claims, demands, liabilities, actions or cause of actions alleging any loss, injury, damages and matter (including claims or demands for any violation of copyright or intellectual property) arising out of any missing or incomplete Crown Land titles, and the Minister, his or her officers, employees and agents shall not be liable for any loss of profits or contracts or any other loss of an kind as a result.

For inquiries please contact a Regional Lands Office.
Corner Brook - 637-2390
Gander - 256-1400
Clareville - 466-4074
St. John's - 729-2654
Goose Bay - 896-2488

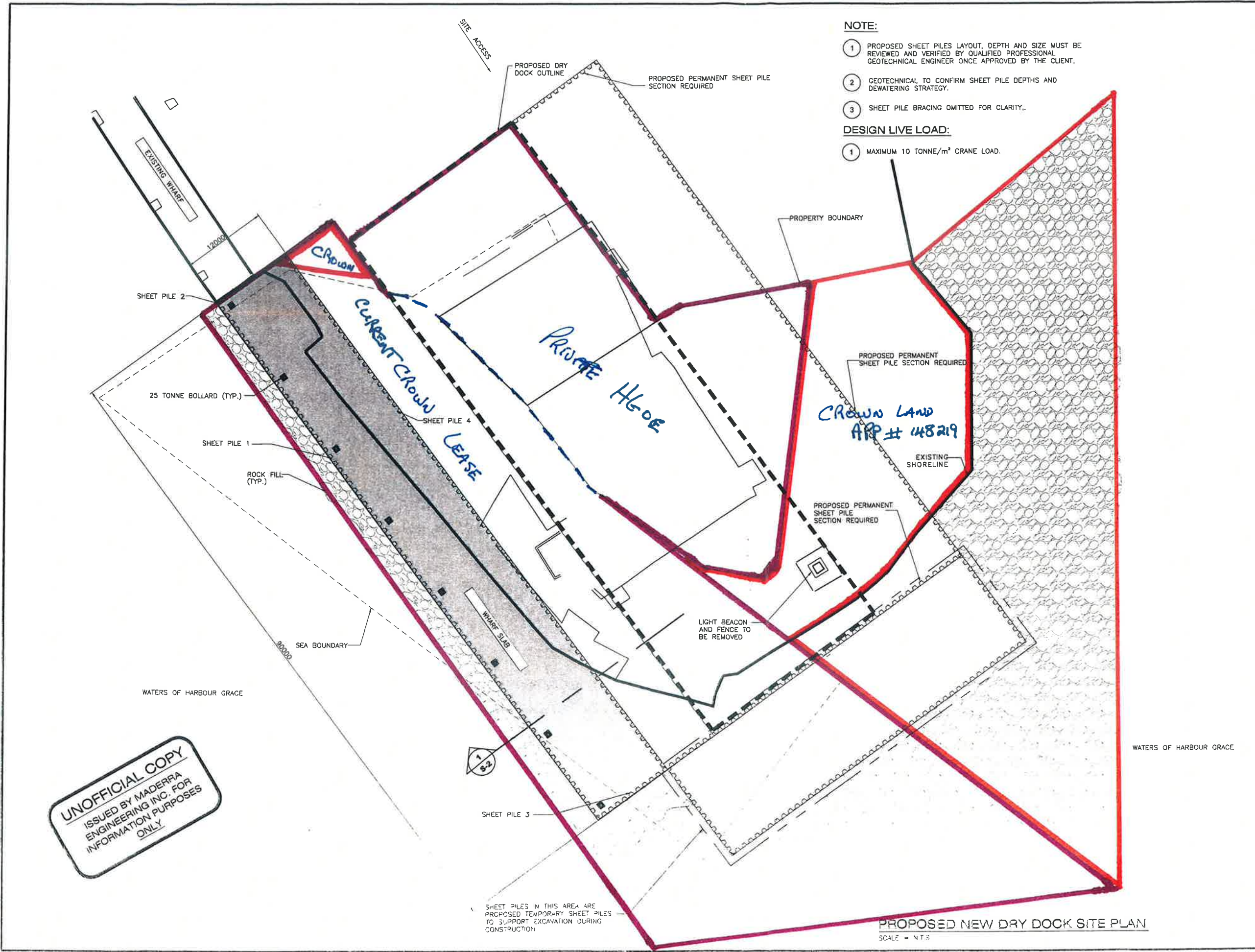


©2015 DigitalGlobe ©2015 GeoEye ©2015 Microsoft Corporation

Crown Lands Division



Scale 1:1,500
 Compiled on June 17, 2015



- NOTE:**
- 1) PROPOSED SHEET PILES LAYOUT, DEPTH AND SIZE MUST BE REVIEWED AND VERIFIED BY QUALIFIED PROFESSIONAL GEOTECHNICAL ENGINEER ONCE APPROVED BY THE CLIENT.
 - 2) GEOTECHNICAL TO CONFIRM SHEET PILE DEPTHS AND DEWATERING STRATEGY.
 - 3) SHEET PILE BRACING OMITTED FOR CLARITY.

- DESIGN LIVE LOAD:**
- 1) MAXIMUM 10 TONNE/m² CRANE LOAD.

DRAWING NOTES

- NOTES:**
- 1.) CONTRACTOR TO VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS ON-SITE. ANY DISCREPANCIES AND/OR UNSATISFACTORY CONDITIONS SHALL BE REPORTED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
 - 2.) DO NOT SCALE FROM THE DRAWINGS

LEGEND:

NO.	DESCRIPTION	MM/DD/YYYY	DATE	BY

REVISIONS

A	A - DETAIL NO.
B	B - SHEET SIZE

PROVINCE OF NEWFOUNDLAND AND LABRADOR

PEG PERMIT HOLDER
THIS PERMIT ALLOWS

MADERRA ENGINEERING

To practice Professional Engineering in Newfoundland and Labrador.
Permit No. as issued by PEG **Y0259**
which is valid for the year **2019**

STAMP

PRIME CONSULTANT

MADERRA ENGINEERING

SUITE 802 | ATLANTIC PLACE |
215 WATER STREET | ST. JOHN'S | NL |
T: 709.739.5002 | F: 709.739.7741

CLIENT

HARBOUR GRACE OCEAN ENTERPRISES

PROJECT

PROPOSED WHARF AND DRY DOCK

HARBOUR GRACE NL

DRAWING

PROPOSED LAYOUT

DRAWN BY	CHECKED BY	APPROVED BY
SB	MH	DM
PROJECT NO.	DWG. FILE NO.	FILE NO.
HGH001		
DATE	SCALE	SHEET NO.
MAY 2015	N.T.S.	S-1 of 2

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ISSUED BY MADERRA ENGINEERING INC. FOR INFORMATION PURPOSES ONLY

SHEET PILES IN THIS AREA ARE PROPOSED TEMPORARY SHEET PILES TO SUPPORT EXCAVATION DURING CONSTRUCTION

PROPOSED NEW DRY DOCK SITE PLAN
SCALE = N.T.S.

APPENDIX E: Shoals, Channels, Buoys

- 1. SNC-Lavalin Study Report**
- 2. Hatch Mott MacDonald letter**
- 3. Channel topo maps**

Shoals, Channels, Buoys – Harbour Grace Harbour

This section outlines many natural and environmental features of Harbour Grace and marine activities in the area.

The data that follows was provided through a study by SNC-Lavalin, for the Town of harbour Grace, December 2014.

▪ **Vessel Traffic Movement**

Harbour Grace is an active seasonal fishing harbour used almost entirely by the inshore fleet (vessels of less than 20 metres), provincial ferries (less than 40 metres) and Canadian Coast Guard vessels (less than 20 metres). The fishing season is usually from April to November, and the boats travel back and forth to the open ocean. In addition to the fishing vessels, there are also larger freezer trawler vessels that land shrimp catch at the cold storage facilities in Harbour Grace. Depending on work being completed at the adjacent Harbour Grace Ocean Enterprises, tug assisted barge traffic may also be present.

The entrance of the harbour has a shoal which poses no difficulty for shipping as it does not impede the access channel. Water depths in the channel are in the range of 8 metres.

- Wave action; surges – high tide, high water surges
 - **Tidal Elevations** -Based on the 1997 NL Southeast Coast Hydrographic Chart 4849 (Canadian Hydrographic Service) & corresponds to Low Normal Tide (LNT)
 - Higher High Water Mean tide: 1.2 m Large tide: 1.4 m
 - Lower Low Water Mean tide: 0.2 m Large tide: 0.0 m
 - **Wind** - Hourly wind pressures as shown in the National Building Code of Canada (NBCC) for the reference location of St. John's are:
 - 1/10 year wind: 0.60 kPa (109 km/hr)
 - 1/50 year wind: 0.78 kPa (125 km/hr)

The most predominate wind direction is southwest to west. The wind rose would be typical for the Harbour Grace area.

ANNUAL WIND STATISTICS EAST COAST AREA 10 - SOUTH EAST COAST

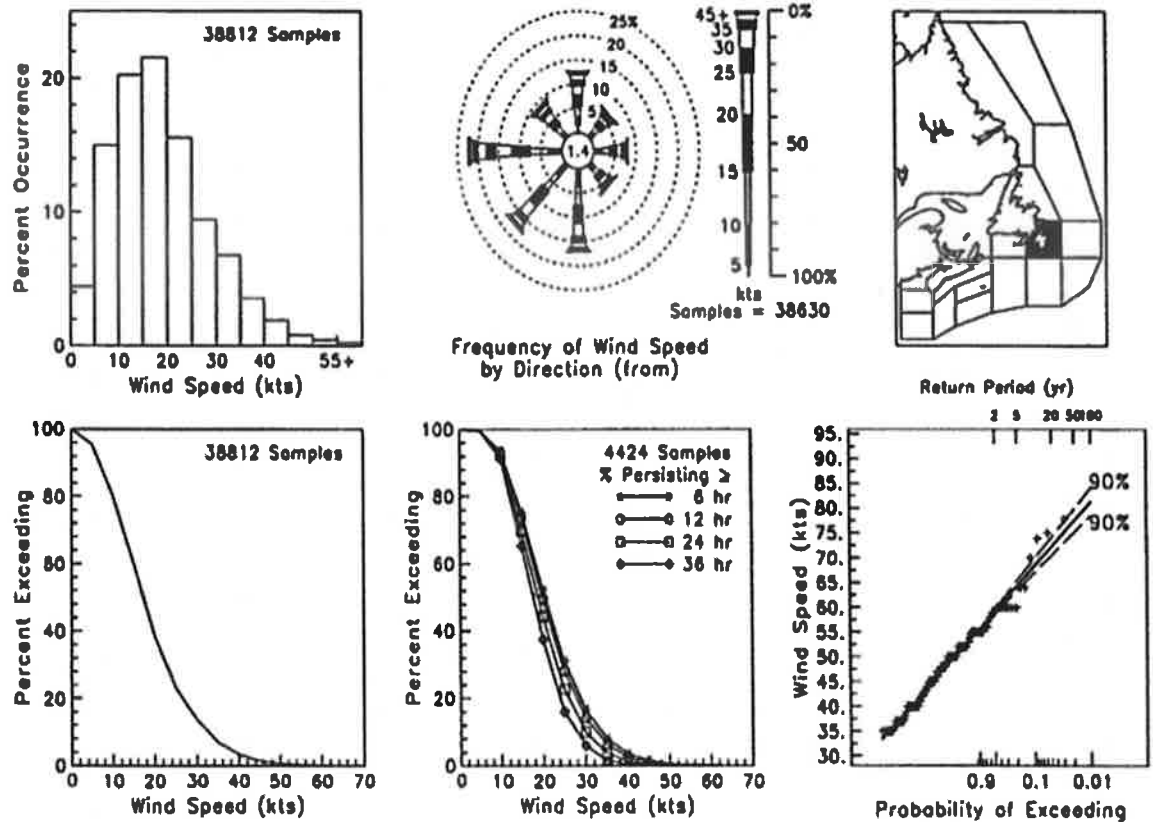


Figure - Annual Wind Statistics

- **Waves**

The narrow harbour offers some protection from most winds except those in the east, southeast and northeast quadrants. This in turn reduces the amount of wave activity in the harbour. The lowest probably of wind is from the east, southeast and northeast directions.

These wave lengths occur outside the harbour. The largest significant waves come from the southwest and west directions. Wave conditions outside the harbour are important when navigating in through the harbour entrance. The harbour itself is very sheltered and very little wave disturbance is experienced inside the harbour. No detailed wave data is available for the site.

ANNUAL WAVE STATISTICS EAST COAST AREA 10 - SOUTH EAST COAST

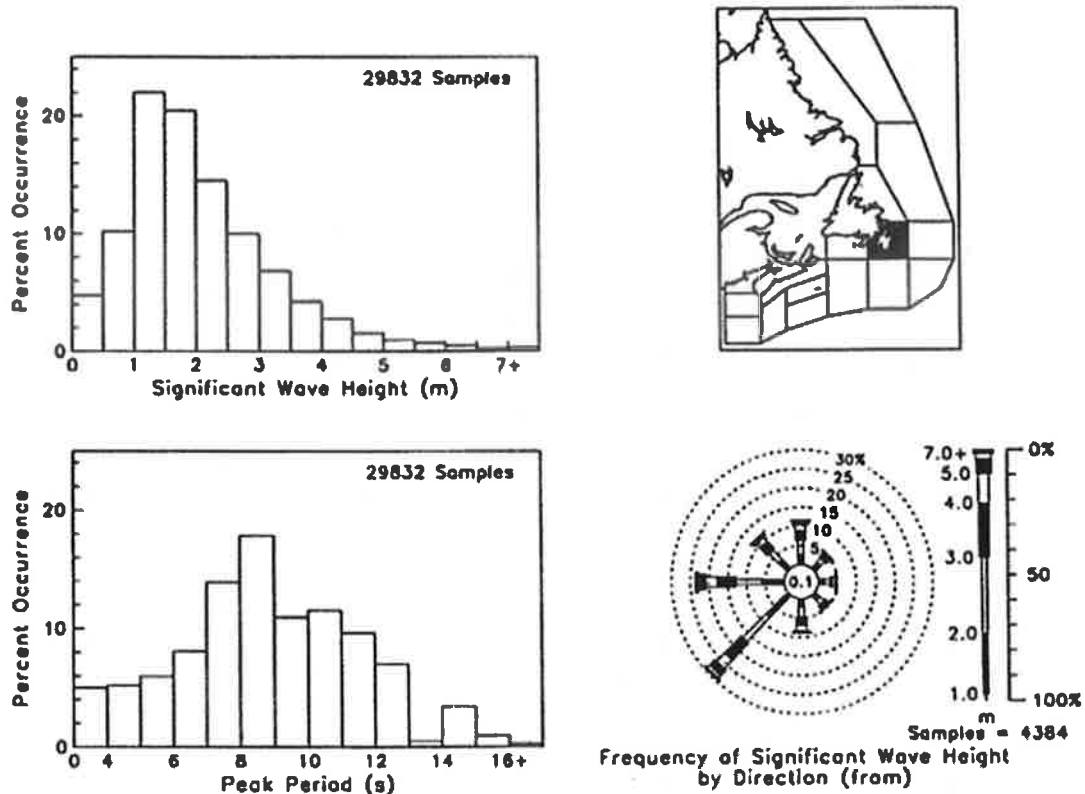


Figure - Annual Wave Statistics

Wind and Wave Climate Atlas, <http://www.meds-sdmm.dfo-mpo.gc.ca/isdm-gdsi/waves-vagues/atlas-eng.htm>

See letter in this Appendix from Hatch Mott MacDonald regarding wave action/surges and wharf design.

- **Currents**

Currents at the facility can range from 2 to 3 knots.

- **Ice**

Harbour Grace Harbour is generally free from ice year round. Occasionally, slob and pack ice are observed in the harbour during early spring. It is possible that navigation can occasionally be hampered by southerly flow of icebergs and pack ice off the entrance of the harbour in the spring of the year.

- **Snow**

Ground snow load from the NBCC for the location of St. John's is: $SS = 2.9 \text{ kPa}$

- **Seismic**

Seismic data taken from the NBCC for the reference location of St. John's, Newfoundland and Labrador, is:

Acceleration-related seismic zone (Z_a): 2

Velocity-related seismic zone (Z_v): 2

Zonal velocity ratio (v): 0.10

- **Live Loads**

The marine structure shall be designed to accommodate a variety of live loads dependent on the functional use of the facilities. In general, the live loads can be categorized as follows:

Laydown areas: 50 kPa

General areas: CL 625 truck loading

Crane Loading: 150 Tonne Mobile Crane

- **Climate Change**

The Newfoundland Labrador Department of Environment and Conservation indicates that seawater rise due to climate change is between 3-5 millimeters per year on the Avalon Peninsula. Over the next 50 years, it is expected that the sea level will rise at least 250 millimeters. Sea level rise has been taken into account in the preliminary design of marine structures.

- **Design Codes and References**

Where applicable, the design of the dock structures shall be in compliance with all Canadian Engineering & Construction standards, codes and design guides. Individual codes will be noted on the detailed specifications for systems and equipment. Equipment, where applicable, shall be Factory Mutual (FM) approved and/or Underwriters Laboratories (UL) listed.

October 2, 2015

Paul Lannon
General Manager
Harbour Grace Ocean Enterprises
4 Beach Hill
Harbour Grace, NL
A0A 2M0

RE: Use of wave run-up analysis for the design of a steel sheet pile wharf for Harbour Grace Ocean Enterprises

Dear Mr. Lannon:

Currently, Hatch Mott MacDonald (HMM) is preparing a conceptual design of a sheet pile wharf for Harbour Grace Ocean Enterprises (HGOE). We feel it is was not necessary to prepare a wave runup analysis at this stage and have designed the structure to match the current wharf elevation. In our discussion with HGOE, there has not been a storm event whereby waves have overtopped the current wharf elevation.

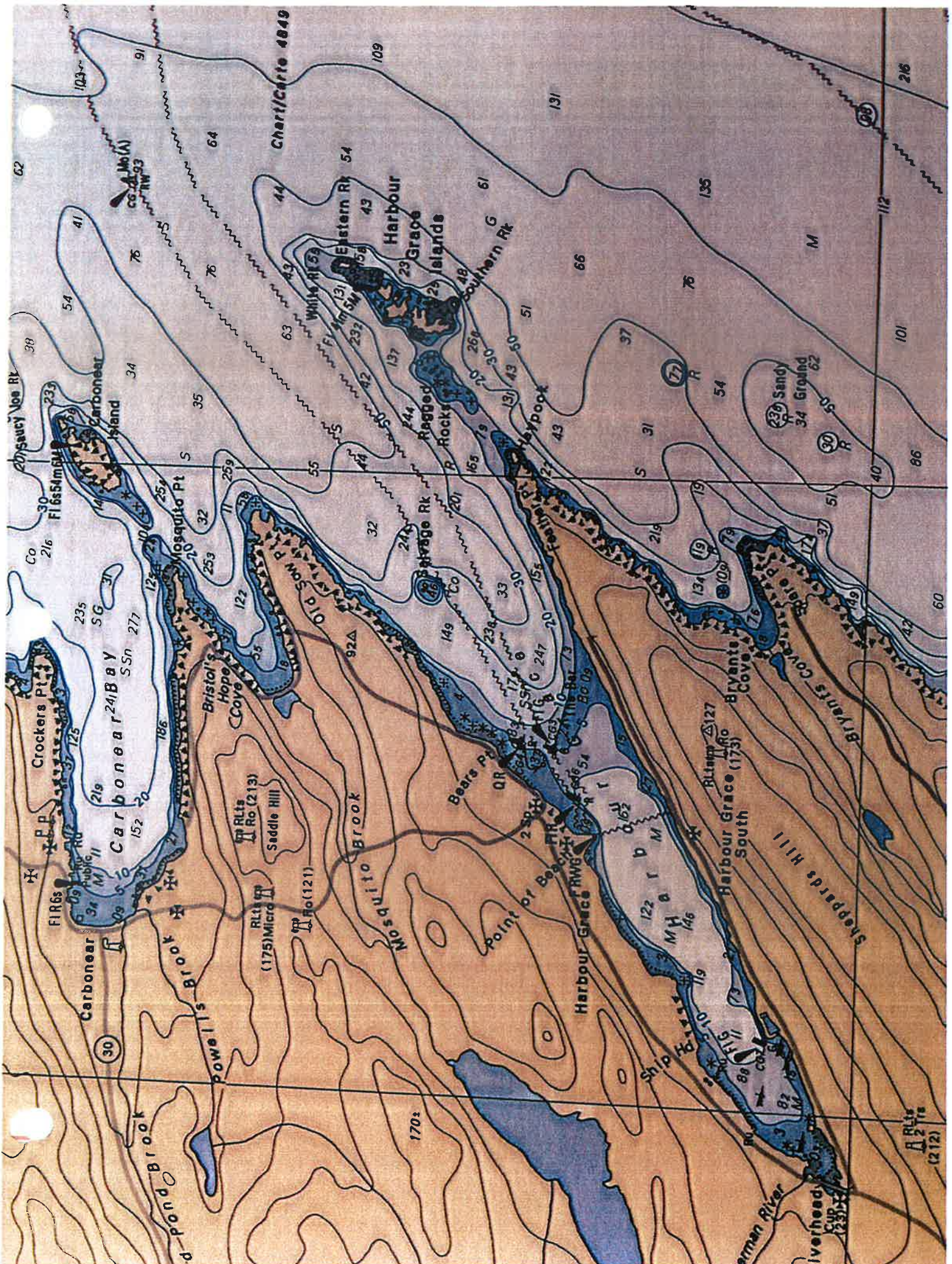
If HGOE proceed with detailed design of a wharf structure, a wave run-up analysis can be performed and its effects on storm return period versus wharf deck elevation can be reviewed with HGOE to determine the appropriate solution.

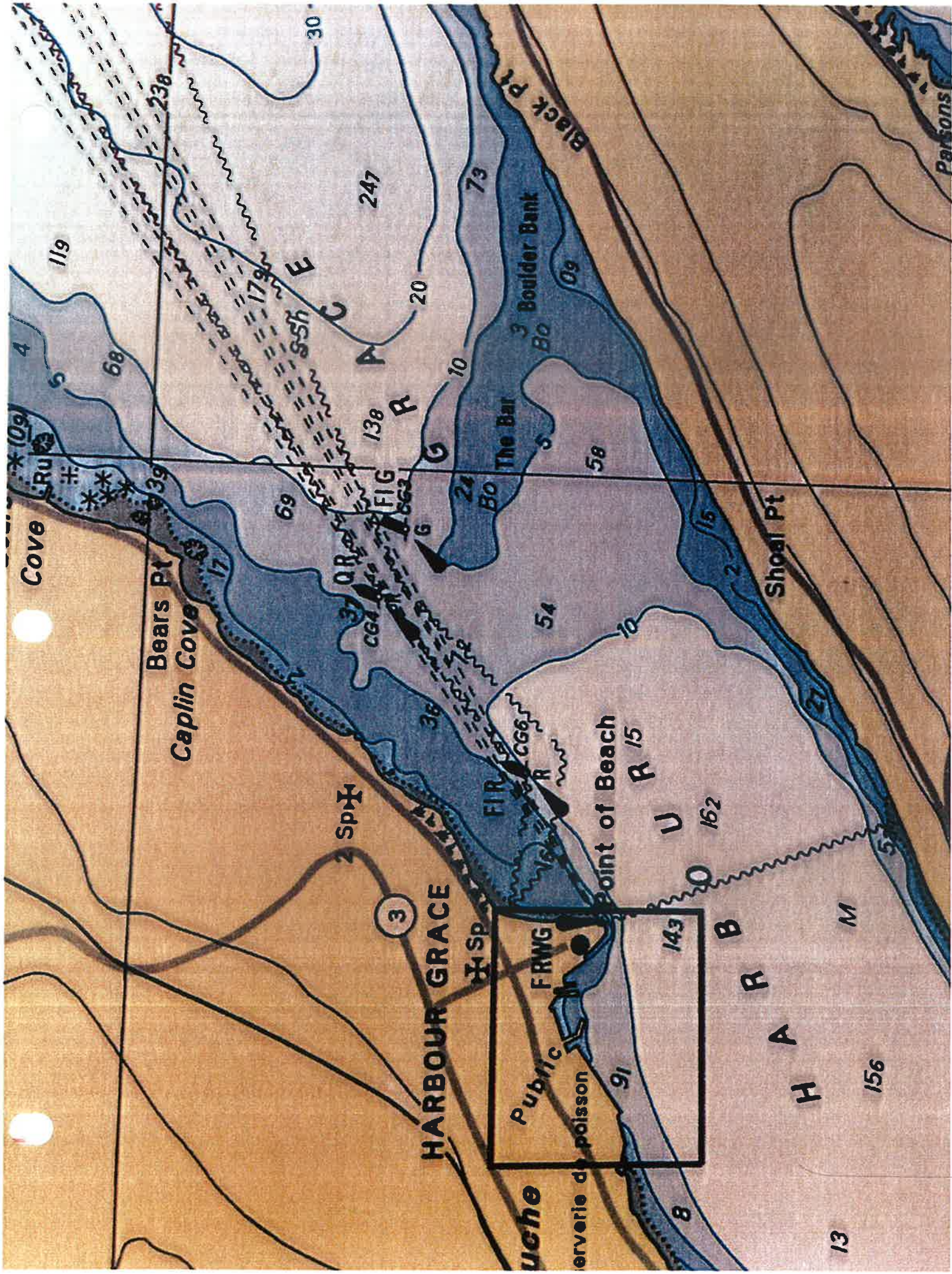
HMM's database of models includes innovative wave transformation, refraction, diffraction, reflection, and run-up for most known wave conditions. HMM's 2 and 3-Dimensional wave, circulation, storm surge, sediment transport, and coastal morphology numerical models have been validated and used in numerous projects located in the Gulf of Mexico, Caribbean, Atlantic and Pacific Oceans and Great Lakes. We also utilizes standard Corps of Engineers models such as ADCIRC, ADCIRC+SWAN, CMS, GENESIS as well as the advanced multi-dimensional models Delft3D, MORPHO, and FLOW3D, among many others.

Yours sincerely,



Lorne Flowers, P.Eng.
Civil and Ports Lead, Canada East
Hatch Mott MacDonald
T 902.420.6466
Lorne.flowers@hatchmott.com





APPENDIX F: Environmental

1. HGOE Certificate Approval

2. Phase 1 EA for 24 Beach Hill*

- a. Site under redevelopment

3. Phase 1 EA for HGOE Shipyard*

- a. Current working shipyard

4. Ambient Air Sampling*

5. Provincial Government Environmental Guidelines – Chapter 14

** Full document available in separate binder and through link*



GOVERNMENT OF
NEWFOUNDLAND AND LABRADOR
Department of Environment and Conservation

CERTIFICATE OF APPROVAL

Pursuant to the Environmental Protection Act, SNL 2002 c E-14.2 Section 83

Issue Date: *December 31, 2013*

Approval No. AA13-125587

Expiration: *December 31, 2015*

File No. 711.012

Proponent: **Harbour Grace Ocean Enterprises Ltd.**
P.O. Box 569
Harbour Grace, NL
A0A 2M0

Attention: Wayne Reid, Operation Manager

Re: **Boat Repair Facility**

Approval is hereby given for the operation of a boat repair facility, at the Marine Service Centre in Harbour Grace, NL.

This Certificate of Approval does not release the proponent from the obligation to obtain appropriate approvals from other concerned provincial, federal and municipal agencies. Nothing in this Certificate of Approval negates any regulatory requirement placed on the proponent. Where there is a conflict between conditions in this Certificate of Approval and a regulation, the condition in the regulation shall take precedence. Approval from the Department of Environment and Conservation shall be obtained prior to any significant change in the design, construction, installation, or operation of the boat repair facility, including any future expansion of the boat repair facility. This Certificate of Approval shall not be sold, assigned, transferred, leased, mortgaged, sublet or otherwise alienated by the proponent without obtaining prior approval from the Minister.

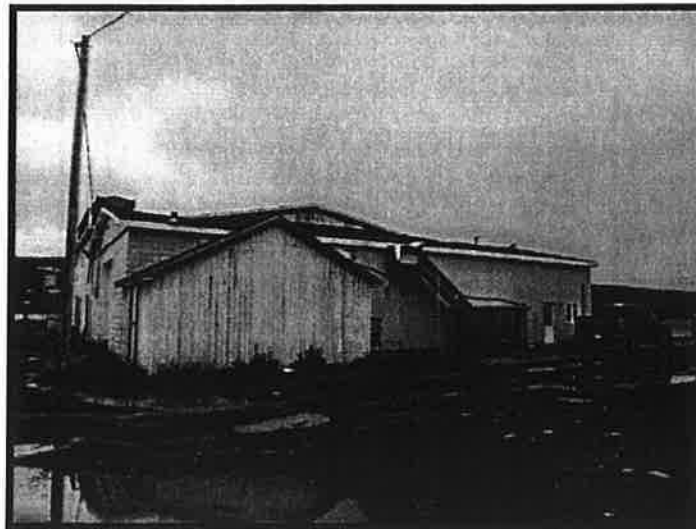
This Certificate of Approval is subject to the terms and conditions as contained therein, as may be revised from time to time by the Department. Failure to comply with any of the terms and conditions may render this Certificate of Approval null and void, may require the proponent to cease all activities associated with this Certificate of Approval, may place the proponent and its agent(s) in violation of the *Environmental Protection Act*, and will make the proponent responsible for taking such remedial measures as may be prescribed by the Department. The Department reserves the right to add, delete or modify conditions to correct errors in the Certificate of Approval or to address significant environmental or health concerns.

Debra Pottle
FOR MINISTER





**Phase I Environmental Site Assessment
24 Beach Hill Road
Harbour Grace, Newfoundland and Labrador**



Prepared for:
Dawe's Welding and Sons Ltd.
P.O. Box 569
Harbour Grace, NL A0A 2M0

Attention: Mr. Wayne Reid

August, 2013

Pinchin File: 02-01-00403

Copyright © 2013 by Pinchin LeBlanc Environmental Limited

Phase I Environmental Site Assessment Marine Service Center, Water Street, Harbour Grace, Newfoundland and Labrador



Prepared for:
Dawe's Welding and Son's Limited
P.O. Box 569
Harbour Grace, NL A0A 2M0

Attention: Mr. Wayne Reid

March, 2011

Pinchin File: 02-01-00205

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November 29, 2013

Pinchin File No. 02-01-00436

Harbour Grace Ocean Enterprises
P.O. Box 569
Harbour Grace, NL
A0A 2M0

Attn: Mr. Wayne Reid, Operations Manager

Re: Ambient Air Sampling Program Summary Report – 2009 and 2011 Sampling Events, Marine Service Center, Water Street, Harbour Grace, Newfoundland and Labrador

Pinchin LeBlanc Environmental Limited (Pinchin) was retained by Dawe's Welding & Son's Limited (Dawe's) in 2009 and 2011 to complete three Ambient Air Sampling Programs at the Marine Service Center facility (now occupied by Harbour Grace Ocean Enterprises) on Water Street in Harbour Grace, Newfoundland and Labrador (hereafter referred to as "the site").

The sampling programs were conducted to meet air sampling requirements as stated in the *Application for a Certificate of Approval, Marine Service Center, Water Street, Harbour Grace, NL*, prepared by Dawe's for the Government of Newfoundland and Labrador Department of Environment and Conservation, dated May 22, 2008.

At the request of Harbour Grace Ocean Enterprises Limited and with the approval of Dawe's, the following letter has been prepared to summarize the findings of those three sampling events.

SCOPE OF WORK

The scope of work for each sampling event conducted on September 8, 2009, November 5, 2009 and July 11, 2011 involved the following:

- Collection of one ambient air sample during the repair or application of fiberglass at the Marine Service Center using laboratory-supplied 6 L Summa canisters (AS-1/T2549, AS-1/379, AS-1/T21633) equipped with controllers to regulate the air flow into canisters over a 24-hour sampling period;
- Submission of the air sample to an accredited laboratory for volatile organic compound (VOC) analyses;
- Comparison of analytical data to recognized guidelines; and,
- Completion of a summary letter report for each event.

LABORATORY WORK

Each air sample was submitted to Maxxam Analytics Inc. (Maxxam) in Mississauga, Ontario for VOC analyses. Maxxam Mississauga is certified by the Standards Council of Canada (SCC) and National Environmental Laboratory Accreditation Conference. Analyses were performed in accordance with the protocols stipulated in Ontario's Ambient Air Quality Criteria – Standards Development Branch, Ontario Ministry of the Environment (February 2008). Analytical results are summarized in the table in Attachment A. The laboratory certificates are included in Attachment B.

During fieldwork, various Quality Assurance/Quality Control (QA/QC) measures were taken. In terms of laboratory testing, our review of the Maxxam Quality Assurance report indicated that all laboratory QA/QC standards were acceptable. The ambient air analytical work conducted for this project was considered an accurate reflection of site conditions.

GUIDELINE FRAMEWORK

VOC concentrations in ambient air were assessed using Ontario's Ambient Air Quality Criteria – Standards Development Branch, Ontario Ministry of the Environment (February 2008).

ANALYTICAL RESULTS

Three ambient air samples were analyzed for VOCs during sampling events conducted in September and November, 2009 and July 2011. Where detected, VOC concentrations in ambient air were below the applicable guidelines for each sampling event.

VOC analytical results for all air samples analyzed are summarized in Table 1, Attachment A.

STANDARD LIMITATIONS

This report was prepared by Pinchin LeBlanc Environmental Limited for the sole and exclusive benefit of our client, Harbour Grace Ocean Enterprises, and for the purposes, project and site location outlined in the report. The report is based on information provided to, or obtained by, Pinchin LeBlanc Environmental Limited (as indicated in this report) and applies solely to site conditions existing at the time of the investigation. This Ambient Air Sampling Program was performed in general compliance with currently-accepted practices for environmental site assessments and in light of specific client requests, agreed scope of work, schedule, and budget.

This investigation was not exhaustive and cannot be construed as a certification of the absence of any contaminants from the site. As stated by the American Society for Testing and Materials

(ASTM) and the Canadian Standards Association (CSA), no environmental site assessment can wholly eliminate uncertainty regarding the potential for environmental liabilities associated with a property. Conclusions derived are specific and limited to the immediate area of investigation. The area of extrapolation is dependant on site-specific conditions. The absence of information relating to a specific substance does not indicate that it is not present.

Conclusions and recommendations made in this report do not constitute a legal opinion. Any third party use of this report, or any reliance on or decisions made based on the findings described in this report, are the sole responsibility of such third parties. Pinchin LeBlanc Environmental Limited accepts no responsibility for damages suffered by any third party as a result of decisions made, or actions conducted based of, this report. No other warranties are implied or expressed.

CLOSURE

We trust that the information contained in this report meets your current requirements. Should there be any questions, do not hesitate to contact our office.

Sincerely,

PINCHIN LEBLANC ENVIRONMENTAL LIMITED

Prepared by,



Melanie Snow, M.A.Sc.
Group Manager
Assessment & Remediation
mdsnow@pinchinleblanc.com

Reviewed by,



Craig Dickson, P.Eng.
Group Leader
Assessment & Remediation
cdickson@pinchinleblanc.com

Reviewed by,



Richard Cottingham, P.Geo.
Vice President,
Assessment & Remediation
rcottingham@pinchinleblanc.com

**GOVERNMENT OF NEWFOUNDLAND AND LABRADOR
DEPARTMENT OF ENVIRONMENT AND CONSERVATION**



CHAPTER 14

Environmental Guidelines for
**CONSTRUCTION AND MAINTENANCE OF WHARVES,
BREAKWATERS, SLIPWAYS AND BOATHOUSES**

**WATER RESOURCES MANAGEMENT DIVISION
Water Investigations Section**

14.0 WHARVES, BREAKWATERS, SLIPWAYS AND BOATHOUSES

Chapter 14

Environmental Guidelines For

**CONSTRUCTION AND MAINTENANCE OF
WHARVES, BREAKWATERS, SLIPWAYS, AND BOATHOUSES**

**Water Resources Management Division
Water Investigations Section**

February 2011

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14.0 WHARVES, BREAKWATERS, SLIPWAYS AND BOATHOUSES

14.1 General

Wharves, breakwaters, slipways and boathouses are all marine structures used for various recreational and commercial purposes. Wharves (docks and piers) are structures located on the shore and can be used for swimming, fishing or for securing boats; breakwaters protect the shore line from wave action and coastal erosion; slipways are ramps that aid in moving boats in and out of the water; and boathouses are built along the shoreline to store boats or other related items.

When it comes to these structures, the main environmental consideration in their construction and design is that they do not affect the water quality; cause loss to fish or other wildlife habitat; adversely affect the environment or impede the passage of fish and ice; movement of water and waves; or cause erosion and sedimentation of shorelines or banks.

These guidelines offer the reader an understanding of important environmental and construction considerations when undertaking the altering of a body of water with a structure such as a wharf / dock, breakwater, slipway or boathouse.

14.1.1 Regulations and Regulatory Bodies

Permits are required under Section 48 of the *Water Resources Act* for any works in or adjacent to a body of water. As of January 1, 2011, a permit is no longer required under the Act for the construction and maintenance of wharves, breakwaters, slipways and boathouses as long as the work is completed in accordance with these guidelines and the work is outside of a Protected Water Supply Area (PWSA). A permit will be required under the Act for any dredging work and infilling of a body of water associated with the construction or installation of these structures.

The proponent may require approvals from other agencies prior to constructing a wharf, breakwater, slipway or boathouse. Approvals may be required from the following:

- The Municipality

14.0 WHARVES, BREAKWATERS, SLIPWAYS AND BOATHOUSES

- For projects within municipal boundaries
- Department of Environment and Conservation
 - Crown Lands Administration Division - Lands Act
 - Water Resources Management Division – Section 39 of the WRA for work in Protected Water Supply Areas
 - Environmental Assessment Division – Environmental Protection Act
- Department of Fisheries & Oceans, Habitat Management Division
 - Fish Habitat (Fisheries Act)
 - Species at Risk Act
- Canadian Coast Guard
 - Construction in Navigable Waters (wharves, dredging etc.)

14.2 Guidelines

14.2.1 Wharf / Dock

There are various types of wharf or dock structures, such as:

- Floating
- Pipe/Pile
- Cribbed
- Concrete Piers; and,
- Cantilever or suspension

Of these structures, cantilevered, floating and docks supported on posts, pipes or piles are least likely to have an adverse environmental effect. The pushing or placement of materials into the water and placement of decking on top is not considered a wharf. Material used for ballast should be cribbed and armor stone placed around cribbing, where required to prevent erosion.

14.0 WHARVES, BREAKWATERS, SLIPWAYS AND BOATHOUSES

14.2.2 Breakwater

Breakwaters are structures composed of various rock or concrete material placed in the water to protect coastal erosion. They can be of various shapes and sizes but should be professionally engineered for maximum efficiency, longevity and environmental consideration. The most common are rubble mound breakwaters.

14.2.3 Slipway / Boat Launch

Construction of a boat launch ramp / slipway should be done in a manner that minimizes the amount of excavation required hence reducing the risk of sediment entering the watercourse. A boat launch or slipway may be constructed with untreated wood, clean gravel/stone or concrete and should be stabilized. All material used should be clean, good quality material, free of metals, organics or other chemicals that may be harmful to receiving waters.

14.3 Maintenance and Removal

14.3.1 General Maintenance

General maintenance work should be carried out as required from time to time. Grouting or resurfacing of structural components as well as the removal of debris which may become caught at piers or locations upstream of marine structure will extend its useful life and minimize the risk of structural failure.

Periodic maintenance such as painting, resurfacing, clearing of debris, or minor repairs, must be carried out without causing any physical disruption of any watercourse. Care must be taken to prevent spillage of pollutants into the water.

The owners of structures are responsible for any environmental damage resulting from dislodgement caused by the wind, wave, ice action, or structural failure.

14.0 WHARVES, BREAKWATERS, SLIPWAYS AND BOATHOUSES

14.3.2 Removal

These guidelines should be followed during the removal of these structures. As with their construction and installation, care should be taken to prevent any adverse environmental affects on the surrounding water body.

14.3.3 Site Restoration

Any areas adversely affected by this project must be restored to a state that resembles local natural conditions. Further remedial measures to mitigate environmental impacts on water resources can and will be specified, if considered necessary in the opinion of the Department of Environment and Conservation.

The bed, banks and floodplains of watercourses, or other vulnerable areas affected by this project, must be adequately protected from erosion by seeding, sodding or placing of rip-rap.

All waste materials resulting from this project must be disposed of at a site approved by the regional Government Service Center of the Department of Government Services. The Department of Government Services may require samples to be submitted for testing and analysis.

14.4 Preconstruction Preparation

All work must take place within the proponent's legal boundaries or with the approval of the land owner. The constructed work must comply with all other terms and conditions provided in the Crown Lands grant, lease or license for occupancy.

Suitable booms must be deployed around construction sites to contain any floating debris that might otherwise be carried away. All booms must be properly maintained and remain in place until all work is completed.

14.0 WHARVES, BREAKWATERS, SLIPWAYS AND BOATHOUSES

Sediment and erosion control measures must be installed before starting work. All control measures must be inspected regularly and any necessary repairs made if damage is discovered.

14.4.1 Scheduling

Proper scheduling of work is an important consideration in the implementation stage of an undertaking and is important from the standpoint of fish habitat protection and the environment. It can also be economically advantageous as well.

The Department of Environment and Conservation recommends that construction near a body of water take place:

- During low flow (easier to restore bank vegetation and sediments will carry slower and settle out quicker); and
- At periods of low rainfall (reduces the chance of erosion and overland runoff).

These conditions generally would occur between June 1st and October 30th. The Department of Fisheries and Oceans (DFO) should be contacted to determine any restrictions to the construction season with regards to protection of fish and fish habitat.

14.5 Construction Practices / Procedures

All operations must be carried out in a manner that prevents damage to land, vegetation, and prevents the pollution of bodies of water. The construction of marine structures has the potential to cause environmental damage and create problems with respect to siltation, pollution, erosion and deposition. Many of these problems occur during the construction phase of work and are often the result of poorly executed construction procedures. These problems can be mitigated or prevented by following preferred construction procedures and techniques. Detailed information on construction practices can be found in Chapter 13, *General Construction Practices* (Located on the Department of Environment and Conservation website).

14.0 WHARVES, BREAKWATERS, SLIPWAYS AND BOATHOUSES

14.5.1 Equipment Operation

All vehicles and equipment working near a body of water must be clean and in good repair, free of mud and oil or other harmful substances that could impair water quality.

The use of heavy equipment in streams or bodies of water is not permitted. Heavy equipment must be kept outside the high-water mark of all drainage courses and bodies of water. The operation of all heavy equipment must be confined to dry, stable areas to reduce production of mud and silt laden water.

Suitable measures must be taken to prevent or reduce the generation of silted or muddied water from the operation of heavy equipment. High traffic areas must be kept well drained to prevent the formation of mud puddles which can contribute to siltation.

Water pumped from excavations for work areas, or any runoff or effluent directed out of work sites, must have silt and turbidity removed by settling ponds, filtration, or other suitable treatment before discharging to a body of water. Effluent discharged into receiving waters must comply with the *Environmental Control Water and Sewage Regulations, 2003*.

14.5.2 Use of Concrete near a Body of Water

Where cast-in-place concrete is required, all fresh concrete must be kept from coming in contact with the watercourse until adequate curing is achieved. The formwork must be constructed with tight joints to prevent leakage and all necessary precautions taken to prevent spillage of concrete in or near a body of water. Dumping of concrete or washing of tools and equipment in any body of water is prohibited.

14.0 WHARVES, BREAKWATERS, SLIPWAYS AND BOATHOUSES

14.5.3 Use of Wood Preservatives

The use of creosote treated wood is strictly prohibited within 15 meters of all bodies of fresh water in the province and strongly discourage in other water bodies. Before using any creosote treated wood, the proponent should contact the Water Resources Management Division at the Department of Environment and Conservation. .

Wood preservatives such as penta, CCA (chromated copper arsenate) or other such chemicals must not be applied to timber near a body of water. All treated wood or timber must be thoroughly dry before being brought to any work site and installed. Untreated wood is ideal from a water quality perspective and, if submerged completely underwater, will last indefinitely. Some wood, such as cedar, contain natural preservatives and is an excellent material for building wharves or piers.

Please note, there are additional restrictions on use of treated wood in Protected Water Supply Areas and a permit is required under Section 39 of the Water Resources Act for all work activities in these areas.

14.5.4 On-Site Use of Petroleum Products or Hazardous Substances

The proposed use of any facility and site must not involve any storage of pollutants such as chemicals, pesticides etc. The storage and handling of gasoline and any petroleum derivative must be carried out according to *The Storage and Handling of Gasoline and Associated Products Regulations, 1982*.

14.5.5 Other Materials

Recycled materials such as old metal, plastic drums or tires are not encouraged to be used as construction materials. They may contain substances which can affect water quality and be harmful to aquatic life.

14.0 WHARVES, BREAKWATERS, SLIPWAYS AND BOATHOUSES

For floating docks, wharves or piers, non-recycled plastics provide excellent flotation, are inert and are durable in the water. Styrofoam also provides excellent flotation, is relatively stable in the water but may break apart. If it is used, it must be enclosed; it is a potential hazard to fish if mistaken for food.

Any fill or ballast material must be of good quality, free of fines or other substances including metals, organics or chemicals that may be harmful to the receiving waters.

14.5.6 Bank Disturbance

At all times, every necessary precaution should be taken to prevent the disturbance of channel banks, bank vegetation and land within the high water mark, flood zone or 15m environmental buffer of any body of water. A minimum 15 meter wide vegetated buffer zone must be maintained along the edge of the water body in order to provide bank stability and maintain local aesthetics.

APPENDIX G: Letters

- 1. Transport Canada**
- 2. Bell Aliant**
- 3. Hatch Mott MacDonald**




Canadian Coast Guard Atlantic Region
Aids to Navigation Office
Attn: Dan Frampton
Southside Road.
P.O. Box 5667
Coast Guard St. John's, South Side Base
St. John's NL

February 16th 2015

Harbour Grace Ocean Enterprise Company
Attn: Mr. Paul Lannon

On January 14, 2015, at the request of Harbour Grace Ocean Enterprise (HGOE) Company, representatives from the Canadian Coast Guard (CCG) Aids to Navigation Program and Maritime and Civil Infrastructure Group visited the Point of Beach aid to Navigation in Harbour Grace, NL to review potential impacts of the proposed development of the area by the company. Mr. Paul Lannon of HGOE outlined the proposed development and associated timelines for the work. Upon review, the current phase of the development is unlikely to have any impact on the CCG navigational aid, CCG are acceptable to HGOE acquiring the surrounding land under the conditions that CCG will maintain right to occupy and operate the existing navigational aid in the current location and are provided right of access for accessibility to perform maintenance and other works on the aid to Navigation and an easement for U/G power supply. Further, the aid is to remain unobstructed to seaward. During the development, HGOE are to advise CCG in the event that any construction activities may impact the physical location of the current aid or for potential future blockage of the aid. HGOE will be responsible for any relocation costs should the aid need to be relocated. It is to be noted that due to the nature of the aid, there is very limited lateral flexibility for movement.


Dan Frampton
Supervisor of Operations
Aids to Navigation
Canadian Coast Guard Atlantic Region

Bell Aliant

November 27, 2014

Jason Brake
Harbour Grace Ocean Enterprises
Harbour Grace, NL.

Reference: " Point Of Beach" / "Harbour Grace" Crown Land

Dear Mr. Jason Brake,

As per your email message October 20th, 2014 , Bell Aliant has no objection to an application submitted by "Harbour Grace Ocean Enterprises " (formally owned by "Quality Bait ") to utilize the section of Crown Land containing an easement belonging to Bell Aliant . This easement containing a sub marine cable that runs under Harbour Grace gives Bell Aliant the right to access their line at any time .

Please be advised that Bell Aliant will not be held liable for any damages to this land or damages to any of Bell Aliant's equipment. Any costs associated with such damages will be the responsibility of Harbour Grace Ocean Enterprises.

We ask that you please contact Mr. Richard Price at 709-739-0986 prior to conducting any work near the underground cable.



Brian Power
Bell Real Estate
709 739-2707 / Fax 709 739-3290
Brian.Power@BellAliant.ca

October 2, 2015

Paul Lannon
General Manager
Harbour Grace Ocean Enterprises
4 Beach Hill
Harbour Grace, NL
A0A 2M0

RE: Use of wave run-up analysis for the design of a steel sheet pile wharf for Harbour Grace Ocean Enterprises

Dear Mr. Lannon:

Currently, Hatch Mott MacDonald (HMM) is preparing a conceptual design of a sheet pile wharf for Harbour Grace Ocean Enterprises (HGOE). We feel it is was not necessary to prepare a wave runup analysis at this stage and have designed the structure to match the current wharf elevation. In our discussion with HGOE, there has not been a storm event whereby waves have overtopped the current wharf elevation.

If HGOE proceed with detailed design of a wharf structure, a wave run-up analysis can be performed and its effects on storm return period versus wharf deck elevation can be reviewed with HGOE to determine the appropriate solution.

HMM's database of models includes innovative wave transformation, refraction, diffraction, reflection, and run-up for most known wave conditions. HMM's 2 and 3-Dimensional wave, circulation, storm surge, sediment transport, and coastal morphology numerical models have been validated and used in numerous projects located in the Gulf of Mexico, Caribbean, Atlantic and Pacific Oceans and Great Lakes. We also utilizes standard Corps of Engineers models such as ADCIRC, ADCIRC+SWAN, CMS, GENISIS as well as the advanced multi-dimensional models Delft3D, MORPHO, and FLOW3D, among many others.

Yours sincerely,



Lorne Flowers, P.Eng.
Civil and Ports Lead, Canada East
Hatch Mott MacDonald
T 902.420.6466
Lorne.flowers@hatchmott.com

APPENDIX H: Hiring Policy



Doc. Ref. shared drive© Harbour Grace Shipyard

Version 1

Issued on 2015-10-06

Last Updated 2015-10-06

Rev:0

Hiring Policy

QMS-OP-006

Page 3 of 3

1.0 Policy Statement:

Harbour Grace Ocean Enterprises (HGOE) will endeavor to recruit and select the best-qualified personnel.

2.0 The Merit Principle:

- HGOE adheres to the Merit Principle in hiring.
- Merit is a rule of conduct that provides for the recommendation of candidates for a position on the basis of the best demonstration of bona fide levels of position related qualifications, knowledge, abilities and personal suitability.
- Merit in staffing is achieved through practices that are seen to be fair, equitable and transparent.
- Fairness means decisions are made objectively, free from bias, patronage or nepotism. Practices reflect the just treatment of all employees and applicants. Equity means equal access to employment opportunities. Practices are free from systemic and attitudinal barriers and duly consider "reasonable accommodations".

3.0 Recruitment & Selection Process

HGOE applies best practices and equal employment opportunity principals in all recruitment and selection processes.

4.0 Hiring

- A person hired by HGOE will serve a probationary period the duration of which will be determined by management. Individuals who are promoted into new positions will serve the required period of probation in the new position. During the probationary period, an employee may be terminated without cause for any reason.
- Upon commencement of employment, a new Employee will be provided with a copy of their job description or a list of duties to be performed, a copy of the current Human Resources Policies & Managerial Guidelines, as well as a safety orientation in accordance with Occupational Health & Safety Standards.

APPENDIX I: Emergency Preparedness



P.O.Box 569 Harbour Grace NL A0A 2M0
Tel (709)596-5186 Fax (709)596-8106
Email info@hgoe.ca

No of Pages:

Emergency Preparedness

Procedures Manual



P.O.Box 569 Harbour Grace NL A0A 2M0
Tel (709)596-5186 Fax (709)596-8106
Email info@hgoe.ca

No of Pages:

Emergency Preparedness Procedures

Table of Contents

1. Employees with First Aid Training
2. Emergency Contact Numbers
3. Emergency Preparedness Policy
4. Fire
5. Evacuation
6. Confined Space Entry and Rescue
7. Site Spill Response Plan
8. Rescue from Heights
9. Rescue from Water
10. Power Failure
11. Person by Vehicle or Mobile Equipment
12. Powerline Contact
13. Violent Threat Coming on Premises



P.O.Box 569 Harbour Grace NL A0A 2M0
Tel (709)596-5186 Fax (709)596-8106
Email info@hgoe.ca

No of Pages:

1. Emergency Preparedness

Employees with First Aid Training

The names of employees with first aid training are posted at various locations within this facility

2. Emergency Preparedness

Emergency Contact Numbers

Carbonear Hospital	945-5111
Hr. Grace Fire Dept.	596-5151
Ambulance	596-5300
RCMP	596-5014
NF Power (Power Shut-Off)	1-800-474-5711
Coast Guard (Environmental)	1-800-563-9089
Hr.Grace Medical Centre	596-6604
Sinyard's Pharmacy	596-5470



P.O.Box 569 Harbour Grace NL A0A 2M0
Tel (709)596-5186 Fax (709)596-8106
Email info@hgoe.ca

No of Pages:

3. Emergency Preparedness and Response Policy

The management of Harbour Grace Ocean Enterprises Ltd. are committed to protecting the health and safety of its employees in the event of an emergency. As such HGOE has taken the following steps to insure we are properly prepared and able to react to known situations:

- There are adequate number of employees trained in first aid and their names are posted in various locations throughout the facility.
- Appropriate first aid kits are available.
- Communications by means of radios are in place.
- Evacuation plan with designated muster stations.
- Spill kit available for environmental emergencies.
- Emergency contact numbers posted throughout the facility.
- Improve our response as warranted.

Signed _____ Date _____



P.O.Box 569 Harbour Grace NL A0A 2M0
Tel (709)596-5186 Fax (709)596-8106
Email info@hgoe.ca

No of Pages:

4. Emergency Preparedness

Fire

In the event that an employee discovers a fire, that employee must:

- Attempt to extinguish a small fire only if trained in the proper use of fire extinguishers and backup support is available.
- If the attempt to extinguish is successful, notify main office and an investigation will begin,
- If the attempt fails to immediately extinguish the fire, sound the alarm with 3 blasts of the horn and notify main office with the details of the incident and if medical attention is required.
- Proceed with the Evacuation Plan if the fire is in the main building.
- Main office will contact appropriate responders.

Hr. Grace Fire Dept- 596-5151

Ambulance- 596-5300

Carbonear Hospital- 945-5111

Police- 596-5014

Roles and Responsibilities

Office Staff;

Notify appropriate responders as required, if necessary.

Investigator

Secure the scene once fire is extinguished. Start an investigation in conjunction with external authorities. If external authorities are not required, conduct an internal investigation to determine cause and implement corrective actions based upon results of the investigation.



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Emergency Preparedness

Evacuation Plan

In the event of a fire/explosion etc. and employees are required to be evacuated, the following applies:

- Sound alarm with 3 blasts of the horn.
- Notify main office with details of the emergency.
- Main office will contact appropriate responders.
- Notify other employees, visitors, contractors and fisherpersons/crew onsite.
- Workers in main building should use the front exit (#1) or rear exit (#2) if front exit is not safely accessible.
- Anyone in the kitchen area should use the exit in the kitchen.
- Designated office personnel or Foreman in the main building will gather time cards and visitor information as verification of personnel onsite.
- All personnel move to Primary Muster Station by the main parking area. If this is a hazardous area, proceed to Secondary Muster Station located next to Hr. Authority gate.
- A head count will be conducted by the foremen as confirmation that everyone is accounted for.
- If emergency personnel are onsite, do not impede their work. Once an all-clear is given, an investigation will begin in conjunction with appropriate authorities or internally.
- After the investigation is concluded, an assessment of the damage will occur and measures to continue production will begin along with measures to prevent similar emergencies from happening.

There are fire exit routes posted in various locations throughout the facility. Become familiar with the escape routes in all areas of the building.

Workers are to shut off all machinery and equipment prior to evacuation.



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Roles and Responsibilities

Office Staff;

Notify appropriate responders.

Foremen;

Ensure machinery and equipment are shut down. The foreman closest to the clock will collect time cards. Ensure employees, visitors, contractors and vessel's crew are escorted to the applicable Muster Station and conduct a head count. Keep all personnel away from oncoming responders' vehicles. Keep all personnel onsite until an all-clear is given.

Investigator;

Secure the scene and conduct an investigation in conjunction with external authorities.



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6. Emergency Preparedness

Confined Space Entry and Rescue

Before any entry is made in a confined space, a Confined Space Entry Permit (FM-031) has to be completed.

Only employees that have confined space training are permitted to enter a confined space.

- Details of the atmosphere must be known prior to any entry and cleaned/controlled as necessary to allow safe access to the worker. This may be done by supplying fresh air to the space and/or the use of respirators with personal monitors.
- Entrants are also to wear a harness with shoulder rings. If shoulder rings present a hazard, use a harness with D ring.
- A hazard analysis has to be completed regarding the physical condition of the space and any identified hazards eliminated or controlled.
- Prior to work starting, a rescue plan specific to the confined space must be implemented with all occupants, attendants and tank watch being aware of the plan.
- A lifeline, SCBA, tripod, or other means of rescue/recovery has to be present depending upon hazards present and design of the space.
- Under no circumstances will the attendant enter the space to attempt rescue. This may cause further injuries and/or fatalities.
- If a rescue has to take place, give the office details of the location, condition of the worker, the reason for the rescue and what responders are needed.
- Trained personnel will enter the tank with SCBA, if necessary.

Roles and Responsibilities

CSE Attendant;



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This position is to monitor and list entrants to the confined space, keep constant communication with the entrants, have appropriate emergency response items available and to alert emergency responders if there is an emergency. At no time will the attendant go into the space and leave the position. The attendant must notify main office with details of the emergency.

Office Staff;

Once alerted by the CSE Attendant of an emergency, office staff will notify appropriate external responders as the situation dictates.

CSE Emergency Responders;

Responders to a Confined Space emergency will be briefed as to the nature of the emergency, the atmosphere within the space and what PPE is required prior to entry. A SCBA, tripod, stretcher and medical supplies are available if required.



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Emergency Preparedness

Site Spill Response Plan

In the event of a spill at this facility, the following response plan must be followed:

- Notify main office and/or a Response Team member.
 - Shut off any ignition sources in the area. This includes motors, pumps, electrical circuits, and anything that can produce a spark.
 - Response team will be activated.
 - Response team will attempt to contain and clean up the spill as fast as possible to minimize any environmental contamination.
 - If this attempt cannot be successfully contained and cleaned up, Coast Guard Spill Response 1-800-563-9089 must be notified with details of the spill and will act under their guidance.
- Other emergency contact numbers are posted throughout the facility.

Procedure for HGOE Site Spill Response Team to clean up spill:

1. Review the MSDS sheet for the material that has been spilled.
2. Perform the clean up as per the MSDS sheet.
3. HGOE Emergency Spill Kit located in the yard has 4-10ft sections of absorbent booms (Spilltech #WB510SN) and 2 bags of absorbent (Qualisorb #628N). These are minimum quantities. Additional materials are located in our Stores.
4. Any liquid recovered is to be placed in the waste oil tank.
5. All solids, ex: rags and absorbents, are to be placed an appropriate/ separate spill container for proper disposal.



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Emergency Preparedness

Site Spill Response Plan

Roles and Responsibilities

Response Coordinator-

This position is to provide assistance by means of decision making and ensuring the clean-up is done in the appropriate manner and to assist the team members in their duties as required. He is to liaise between the appropriate authorities to ensure that the clean-up is done safely and to minimize the negative effects to the environment. He also has to document all activities and ensure accurate reporting to the appropriate authorities.

Team Members-

They are to use the supplies and materials available to contain the spill and minimize or eliminate any contaminants from causing any or further damage to the environment. Their experience and knowledge may be needed by means of advice to the coordinator when required.



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8. Emergency Preparedness

Rescue from Heights

In the event that a worker who has fallen from a height and is suspended at the end of the lanyard, if a self-rescue is not possible, the worker has to be retrieved as soon as possible.

Any person that has to be rescued from a height should have a harness with a lanyard attached to a solid anchor point.

- If the worker is on a scissor lift and is in good condition, lower the lift from the ground control to slowly descend safely.
- If a worker is suspended from another location, we have two scissor lifts that can be used to rescue if the situation is warranted.
- If a worker cannot be retrieved by these means, the Hr. Grace Fire Dept, 596-5151 must be notified immediately.
- In any event, the worker must be taken to the hospital to be checked for any injuries.

Roles and Responsibilities

First Responder

The responder must wear appropriate PPE and get assistance from other employees and/or first aid responders before attempting a rescue/retrieval. Advise office staff if medical attention or external responders is required.

Office Staff;Notify external responders as required.

Investigator;Secure the scene and start the investigation.

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Emergency Preparedness

Rescue from Water

HGOE employees are required to wear life vests and not work alone when working on vessels that are on the water. Visitors are also required to wear life vests while on the wharf.

- If a person falls in the water, alert someone to call the appropriate responders for the condition of the person in the water.
- Get help from someone close to the scene.
- Throw a life ring to the person and guide him/her to the nearest ladder.
- If the person is non-responsive, an individual with proper floatation device, will/ may need to enter the water to keep the subject's head above water.
- Give first aid as soon as possible.
- Remove person from the water if it can be done safely.
- Wrap victim in a blanket or something to keep him/ her warm.
- Wait for an ambulance.

Roles and Responsibilities

First responder;

Alert others near the scene about the situation. Attempt to retrieve the victim.

Office Staff;

Notify appropriate responders as necessary.

Investigator;

Secure the scene and start an investigation.



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Emergency Preparedness

Power Failure

At HGOE, we do not have any equipment that would have to be monitored and/or shut down in a specific manner to minimize any negative effects that a power loss could cause. However, power loss would minimize production throughout the facility. Vessels that are on shore power should be re-energized as soon as power is restored to prevent any negative consequences from extended power loss to furnaces and/or freezers.

If the power outage originated within this facility, NL Power (1-800-474-5711) must be notified by office personnel to arrange for an immediate response to address the possible issue.

If the power outage originated outside our facility, NL Power should be contacted to advise of a time-frame of power restoration.

Emergency lighting will engage and this will enable employees to safely exit the facility as per our evacuation plan.

If power will be off for an extended time, shut off water and drain lines to prevent possible freezing and rupturing of pipes. Computers and other electronic equipment should not be turned on until the ambient temperature is warm enough to avoid condensation on any sensitive components.

Roles and Responsibilities

Office Staff;

Notify NL Power as to status of the outage and/or notify our electrical contractor with details of the outage.

Maintenance;

Drain water lines, if necessary, to prevent freezing and rupturing. Once the status of the power failure is known and it may be out for an extended period, start the alternate power source (generator) if available.



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Emergency Preparedness

Person Hit by Vehicle or Mobile Equipment

If anyone on HGOE property is involved in an accident/incident involving a motor vehicle or mobile equipment:

- Administer first aid as soon as possible, if necessary,
- Notify main office and call the ambulance 596-5300, if necessary,
- Secure the accident scene and take pictures,
- Start an accident/incident investigation,
- Depending on the severity of the injuries, OHS may need to be advised immediately. Refer to section 10 in OHS Regulations.
- If alcohol or other impairment is suspected, or if damage is extensive to external third party, RCMP must be notified.
- Determine the root cause of the accident so similar accidents can be prevented.

Roles and Responsibilities

First Aid Responder;

Assess the extent of injuries, administer appropriate first aid, keep victim stable.

Office Staff;

Notify appropriate responders.

Investigator;

Secure the scene immediately and start an investigation in conjunction with external responders if present. If not, proceed with internal investigation to determine cause and to implement corrective actions.

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Emergency Preparedness Powerline Contact

- Assume that ALL power lines are energized
- If contact is made and you can't break contact, notify the utility company
- Stay on or in the vehicle
Only leave the vehicle if there is a life threatening emergency, ex: fire
Stay in or on the vehicle until a utility person is onsite and says it is safe to leave
Do Not Panic
- Keep everyone away from the possibly energized vehicle
Warn others not to come within 10 meters because the ground may be energized
- Try to break contact
Try to move the vehicle in the reverse direction that caused the contact

In case of fire or other immediate danger, the operator should follow these steps for jumping:

- Jump clear of equipment
- Keep both feet together
- Ensure both feet hit the ground at the same time
- Do not touch any piece of the equipment as you jump
- Do not let any other part of your body, ex:hand, touch the ground
- When your feet touch the ground and you have cleared the vehicle, shuffle (keep both together) or hop (let both feet touch the ground at the same time) at least 10 meters or 33 feet, away from the energized vehicle



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13. Emergency Preparedness

Violent Threat Coming on Premises

If an individual approaches our facility in a threatening manner or has means of causing bodily harm to anyone on site, these procedures should be followed:

- Office staff should lock doors and get to a safe room, lock the door, turn off lights, call RCMP and keep quiet. Either office upstairs has only one entrance and is not accessible through any window. Stay there until authorities give an all clear.
- Employees that are in the yard should get aboard the nearest vessel and find an enclosed area that can be secured. Turn off lights, keep quiet and wait for an all clear from the authorities.
- Once the threat is contained and an all clear is given, all personnel should proceed to the muster station for a head count.

Once all employees are accounted for, an evaluation of the events will take place and improvements may be required.